CHAPTER Env-Wq 1500 ALTERATION OF TERRAIN

Statutory Authority: RSA 485-A:6, VIII; RSA 485-A:17

PART Env-Wq 1501 PURPOSE AND APPLICABILITY

Env-Wq 1501.01 Purpose. The purpose of these rules is to implement the intent of RSA 485-A:1 to protect drinking water supplies, surface waters, and groundwater by specifying the procedures and criteria for obtaining permits required by RSA 485-A:17.

Env-Wq 1501.02 Applicability. These rules shall apply to any person proposing to:

(a) Dredge, excavate, place fill, mine, transport forest products, or undertake construction in or on the borders of surface waters of the state; or

(b) Significantly alter the characteristics of the terrain in such a manner as to impede the natural runoff or create an unnatural runoff.

PART Env-Wq 1502 DEFINITIONS

Env-Wq 1502.01 "100-year floodplain" means those areas identified as a 100-year floodplain on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps.

Env-Wq 1502.02 "Alteration of terrain (AOT) permit" means a permit issued under RSA 485-A:17 for projects that require a permit and do not qualify for a general permit by rule or a timber harvesting permit by rule.

Env-Wq 1502.03 "Antidegradation" means the provisions of the water quality standards that maintain and protect existing water quality and uses.

Env-Wq 1502.04 "Assimilative capacity" means the amount of a pollutant that can be added to a waterbody without causing violations of applicable water quality criteria.

Env-Wq 1502.05 "Bioretention system" means a shallow vegetated depression that treats stormwater as it flows through a soil media.

Env-Wq 1502.06 "Borrow area" means an area where soil material is removed to be used in other areas for construction purposes.

Env-Wq 1502.07 "Bulk plant or terminal" means that portion of a property where petroleum products or hazardous waste liquids are received by tank vessel, pipeline, tank car, or tank vehicle and are stored or blended in bulk for the purpose of distributing such liquids by tank vessel, pipeline tank car, tank vehicle, portable tank, or container.

Env-Wq 1502.08 "Certified professional erosion and sediment control specialist (CPESC specialist)" means an individual certified by the Certified Professional Erosion and Sediment Control Specialist Council as competent to develop and implement erosion and sediment control practices.

Env-Wq 1502.09 "CHECK-RAS" means the program designed by FEMA used to verify the validity of an assortment of parameters found in the HEC-RAS hydraulic modeling program, which can be downloaded for free at http://www.fema.gov/plan/prevent/fhm/frm_crdl.shtm.

Env-Wq 1502.10 "Community public water supply well" means an active well used as a source by a community water system as defined in RSA 485:1-a, I.

Env-Wq 1502.11 "Curve number (CN)" means a numerical representation used to describe the stormwater runoff potential for a given drainage area based on land use, soil group, and soil moisture, derived as specified by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS).

Env-Wq 1502.12 "Department" means the department of environmental services.

Env-Wq 1502.13 "Detention basin" means a structure designed to hold stormwater.

Env-Wq 1502.14 "Disconnected impervious cover" means impervious cover that does not contribute directly to stormwater runoff from a site, but directs stormwater runoff to on-site pervious cover to infiltrate into the soil or be filtered by overland flow so that the net rate and volume of stormwater runoff from the disconnected impervious cover is not greater than the rate and volume from undisturbed cover of equal area.

Env-Wq 1502.15 "Dredge" as a verb means to make a body of water such as a lake, river, channel, harbor, or other area of surface water wider, deeper, or cleaner by the removal of sand, silt, mud, rock, or other such material.

Env-Wq 1502.16 "Earth moving" means filling, grading, dredging, mining, excavation, construction, removal of topsoil, removal of stumps, or any other activity that results in a change to the preexisting ground conditions.

Env-Wq 1502.17 "Effective impervious cover" means all impervious cover that is not disconnected impervious cover.

Env-Wq 1502.18 "Excavate" means to dig out and remove to form a cavity, or to remove material from any land area.

Env-Wq 1502.19 "Fill" as a noun means any rock, soil, gravel, sand or other material that has been deposited or caused to be deposited by human activity.

Env-Wq 1502.20 "Filtering practices" means methods that capture and temporarily store the water quality volume and pass it through a bed of sand, soil, or other acceptable treatment media to remove pollutants from the water.

Env-Wq 1502.21 "Forest buffer" means a wooded area of land with a canopy cover and an undisturbed layer of vegetation covering the mineral soil.

Env-Wq 1502.22 "General permit by rule" means authorization to undertake alteration of terrain activities as specified in Env-Wq 1503.03.

Env-Wq 1502.23 "Gravel wetland" means a horizontal-flow filtration system that relies on a dense root mat, crushed stone, and a microbe rich environment to treat stormwater.

Env-Wq 1502.24 "Groundwater protection areas" means:

(a) Wellhead protection areas for an active community and non-transient, non-community public water supply wells; and

(b) Areas of groundwater reclassified as GA1 or classified as GA2 pursuant to RSA 485-C and Env-Ws 420 or successor rules, Env-Dw 901.

Env-Wq 1502.25 "Groundwater recharge volume (GRV)" means the volume of water to be infiltrated at a site subsequent to development.

Env-Wq 1502.26 "High-load area" means a land use or activity listed in (a) or (b), below, unless a source control plan for the site on which the use or activity occurs demonstrates that there will be no exposure of regulated substances to precipitation or runoff and no release of regulated substances from any portion of the site:

(a) Any land use or activity in which regulated substances are exposed to rainfall or runoff with the exception of areas where the only regulated substance exposed to rainfall or runoff is road salt that has been applied for deicing of pavement on the site; or

(b) Any land use or activity that typically generates higher concentrations of hydrocarbons, metals, or suspended solids than are found in typical stormwater runoff, including but not limited to the following:

(1) Industrial facilities subject to the NPDES Multi-Sector General Permit, not including areas where industrial activities do not occur, such as at office buildings and their associated parking facilities or in drainage areas at the facility where a certification of no exposure pursuant to 40 CFR §122.26(g) will always be possible;

(2) Petroleum storage facilities;

(3) Petroleum dispensing facilities;

(4) Vehicle fueling facilities;

(5) Vehicle service, maintenance and equipment cleaning facilities;

(6) Fleet storage areas;

(7) Public works storage areas;

(8) Road salt facilities;

(9) Commercial nurseries;

(10) Non-residential facilities having uncoated metal roofs with a slope flatter than 20%;

(11) Facilities with outdoor storage, loading, or unloading of hazardous substances, regardless of the primary use of the facility; and

(12) Facilities subject to chemical inventory under Section 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Env-Wq 1502.27 "Hydrologic Engineering Centers River Analysis System (HEC-RAS)" means a hydraulic modeling program developed by the US Army Corps of Engineers that is frequently used by engineers to perform one-dimensional hydraulic calculations for natural and constructed channels, which can be downloaded for free at http://www.hec.usace.army.mil/software/hec%2Dras/.

Env-Wq 1502.28 "Impervious cover" means a structure or a land surface with a low capacity for infiltration, including but not limited to pavement, roofs, roadways, and compacted soils with a curve number of 98 or greater.

Env-Wq 1502.29 "In or on the borders of surface waters of the state" means within the high water mark of any surface water, or on any land within such a distance of a surface water that direct or immediate water quality degradation may result from the activities occurring on the land.

Env-Wq 1502.30 "Infiltration basin" means an in-ground or underground basin that is at least 25 feet wide and at least 25 feet long to which runoff is discharged and which contains water while it percolates into the surrounding soil.

Env-Wq 1502.31 "Infiltration trench" means an in-ground or underground trench with a maximum width of 25 feet filled with stone to which runoff is either piped directly or flows overland, from which it percolates into the surrounding soil.

Env-Wq 1502.32 "Infiltration practices" means methods that capture and temporarily store the water quality volume before allowing it to infiltrate into the soil, such as infiltration basins and infiltration trenches.

Env-Wq 1502.33 "In-ground basin" means a basin that is in the ground but open to the atmosphere.

Env-Wq 1502.34 "Land surface" means the exposed surface of any land areas including road surfaces, parking lots, air strips, shopping centers, roofs, and any other surface, whether in a natural or developed state.

Env-Wq 1502.35 "Larger plan of development" means a project in which different parts of the property or properties will be developed in geographical or time-based phases, excluding single family or duplex residential subdivisions in which disturbance of individual lots will not occur until after the construction and stabilization of all other items of construction associated with the subdivision are complete and:

(a) For properties not within the protected shoreland as defined in RSA 483-B, the total contiguous area to be disturbed as described in Env-Wq 1503.12(a)(1) - (8) will be less than 100,000 square feet; or

(b) For properties within the protected shoreland as defined in RSA 483-B, the total contiguous area to be disturbed as described in Env-Wq 1503.12(a)(1) - (8) will be less than 50,000 square feet.

Env-Wq 1502.36 "Meadow buffer" means a land area that has a dense cover of grasses or a combination of grasses and shrubs or trees, that is mowed not more than twice per calendar year.

Env-Wq 1502.37 "National Flood Frequency program (NFF)" means a regression equation program developed by US Geological Survey that estimates flood-peak discharges for every state, which can be downloaded for free at http://water.usgs.gov/software/nff.html.

Env-Wq 1502.38 "Non-community public water supply well" means an active well used as a source by a non-community water system as defined in RSA 485:1-a, X.

Env-Wq 1502.39 "Non-transient, non-community public water supply well" means an active well used as a source by a non-transient, non-community water system as defined in RSA 485:1-a, XI.

Env-Wq 1502.40 "Normal agricultural operations" as used in RSA 485-A:17 and this chapter means those activities that are necessary for an agricultural operation as defined in RSA 21:34-a, including the

removal of trees and stumps from lands that are not wetlands solely for purposes of conversion to agriculture but excluding timber harvesting operations as covered by RSA 485-A:17, IV, provided the activities:

(a) Are not intended as a phase towards site development for a purpose other than agriculture;

(b) Will not significantly alter the characteristics of the terrain in such a manner as to impede the natural runoff or create an unnatural runoff by causing significant contour changes by filling, grading, or terracing, or any combination thereof, other than temporary impacts associated with construction allowed under (c), below; and

(c) Do not involve the erection of structures or the construction of roads that would convert more than 10,000 square feet to impervious cover.

Env-Wq 1502.41 "Pollutant" means "waste" as defined by RSA 485-A:2, XVI, including but not limited to sediments, total suspended solids (TSS), phosphorus, nitrogen, metals, pathogens, dissolved substances, floatable debris, and oil and other petroleum products.

Env-Wq 1502.42 "Private water supply well" means a water supply well as defined in RSA 482-B:2 that is currently used as a source of water for human consumption and is not a public water supply well.

Env-Wq 1502.43 "Public water supply well" means an active well used as a source by a public water system.

Env-Wq 1502.44 "Public water system" means "public water system" as defined in RSA 485:1-a, XV.

Env-Wq 1502.45 "Qualified engineer" means an individual licensed under RSA 310-A to practice as a professional engineer in New Hampshire, who is competent to practice in the area of civil engineering.

Env-Wq 1502.46 "Receiving waters" means a river, stream, lake, pond, wetland, or any other surface water into which runoff is discharged.

Env-Wq 1502.47 "Regulated substance" means "regulated substance" as defined in Env-Ws 421.03(f) or successor rule, Env-Wq 401.03(h).

Env-Wq 1502.48 "Runoff" means any water on or flowing on or across the land surface.

Env-Wq 1502.49 "Seasonal high water table (SHWT)" means the top of the upper most soil horizon that contains 2% or more distinct or prominent redoximorphic features that increase in percentage with increasing depth.

Env-Wq 1502.50 "Sediment forebay" means a pool at the inlet end of a treatment structure that provides for initial settling of solids and even distribution of flow.

Env-Wq 1502.51 "Significantly alter the characteristics of the terrain" means to undertake any activity anywhere in the state that changes or disturbs the terrain so as to impede the natural runoff or create an unnatural runoff that has the potential to adversely affect water quality in surface waters of the state. Examples of activities that significantly alter the characteristics of the terrain include, but are not limited to:

(a) Timber harvesting operations as covered by RSA 485-A:17, IV; and

(b) Earth moving activities that result in a temporary or permanent disturbance of:

(1) An area having a grade of 25% or greater measured at 2-foot intervals within 50 feet of any surface water; or

(2) More than 100,000 square feet of contiguous area, or 50,000 square feet or more of contiguous area if any portion of the disturbance is within the protected shoreland as defined in RSA 483-B.

Env-Wq 1502.52 "Site specific permit" means a permit issued by the department pursuant to RSA 485-A:17 under Env-Ws 415 as in effect immediately prior to the 2009 effective date of Env-Wq 1500, equivalent to an alteration of terrain permit.

Env-Wq 1502.53 "Slope" means the incline of a land area expressed as the ratio of horizontal distance to vertical distance.

Env-Wq 1502.54 "Stabilized" means in a condition in which the soils on the site will not erode under the conditions of a 10-year storm.

Env-Wq 1502.55 "Stormwater pond" means an artificial structure that is designed to capture runoff, which includes a permanent pool of water and which may include extended detention.

Env-Wq 1502.56 "Stormwater management system" means the totality of stormwater treatment practices, stormwater conveyances, and groundwater recharge practices.

Env-Wq 1502.57 "Stormwater wetlands" means an artificial structure that is designed to capture runoff, which includes shallow marsh areas and may also incorporate small permanent pools, extended detention storage, and multi-cell submerged gravel wetlands.

Env-Wq 1502.58 "Substratum" means the part of the soil below the part of the soil profile in which the processes of soil formation are active.

Env-Wq 1502.59 "Surface sand filter" means a filtering practice that treats stormwater by settling out larger particles in a sediment chamber and then filtering stormwater through a sand media.

Env-Wq 1502.60 "Surface waters of the state" means surface waters of the state as defined in RSA 485-A:2, XIV and includes all areas regulated under RSA 482-A.

Env-Wq 1502.61 "Timber harvesting operations" means the cutting and removal of forest products; the construction of bridges, fords, culverts, roads and landings; skidding, and other similar activities which have the potential to result in a significant alteration of the characteristics of the terrain. Timber harvesting operations do not include removal of timber or cordwood or other forest products for noncommercial personal use.

Env-Wq 1502.62 "Timber harvesting permit by rule" means authorization to undertake timber harvesting operations as specified in Env-Wq 1503.04.

Env-Wq 1502.63 "To mine" means to remove usable materials by excavating, dredging, blasting, or any other means which significantly alters the characteristics of the terrain or occurs in or on the borders of surface waters of the state.

Env-Wq 1502.64 "Total impervious cover" means the sum of disconnected impervious cover plus effective impervious cover.

Env-Wq 1502.65 "To transport forest products" means to move or convey timber and related products within an area bounded by permanent roadways.

Env-Wq 1502.66 "To undertake construction" means to perform any fabrication of any structure or any appurtenance to a structure, or any activity preliminary to fabricating such structure or appurtenance, such as earth moving, that involves a significant alteration of the characteristics of the terrain or that occurs in or on the borders of surface waters of the state.

Env-Wq 1502.67 "Underground sand filter" means a filtering practice that treats stormwater as it flows through underground settling and filtering chambers.

Env-Wq 1502.68 "Undisturbed cover" means a natural land surface whose permeability has not been altered by human activity.

Env-Wq 1502.69 "Vegetated filter strip" means an area of land with natural or planted vegetation designed to receive sheet runoff from up-gradient development.

Env-Wq 1502.70 "Water quality inlet" means an underground, multi-chambered tank designed to remove sediments from and reduce the amount of floatable solids in runoff.

Env-Wq 1502.71 "Water quality depth" means the depth associated with the water quality volume.

Env-Wq 1502.72 "Water quality flow (WQF)" means the peak flow rate associated with the water quality volume.

Env-Wq 1502.73 "Water quality standards" means the combination of designated uses of surface waters and the water quality criteria for such surface waters based upon such uses as described in RSA 485-A:8-12 and Env-Wq 1700.

Env-Wq 1502.74 "Water quality volume (WQV)" means the volume of water equivalent to the volume of runoff attributable to the first one inch of rainfall.

Env-Wq 1502.75 "Wellhead protection area (WHPA)" means "wellhead protection area" as defined in RSA 485-C:2, XVIII, namely "the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield."

Env-Wq 1502.76 "Well production volume" means the maximum daily volume produced by or approved for production by a public water supply well and used by the department as the basis for determining the sanitary protective radius for the well.

PART Env-Wq 1503 PERMIT REQUIREMENTS

Env-Wq 1503.01 Applicability.

(a) The rules in this part relative to permit application submittal and review shall apply to:

(1) Any application filed after the 2009 effective date of Env-Wq 1500; and

(2) Any application filed prior to the 2009 effective date of Env-Wq 1500 that is not complete, as determined under Env-Ws 415.06 and Env-Ws 415.07, as of the 2009 effective date of Env-Wq 1500, regardless of when the completeness determination is made.

(b) Any complete application filed prior to the 2009 effective date of Env-Wq 1500 shall be reviewed based on the standards specified in Env-Ws 415 as effective February 24, 2005.

Env-Wq 1503.02 Permit Required.

(a) Subject to (b), below, no person shall dredge, excavate, place fill, mine, transport forest products, or undertake construction in or on the borders of surface waters of the state and no person shall undertake any activity that will significantly alter the characteristics of the terrain without a general permit by rule, a timber harvesting permit by rule, or an alteration of terrain (AOT) permit obtained in accordance with this chapter.

(b) No permit under these rules shall be required for normal agricultural operations as defined in Env-Wq 1502.40. If a project includes development which requires a permit and normal agricultural operations which do not need a permit, an application shall be submitted only for the development which requires a permit.

(c) A disturbance shall be considered an unpermitted disturbance if it is not covered by an AOT permit or site specific permit, does not qualify for a general permit by rule or a timber harvesting permit by rule, and is:

(1) Outside the area depicted on the plans approved as part of an AOT permit per Env-Wq 1503.20(c) or site specific permit issued under Env-Ws 415;

(2) Not a normal agricultural operation as defined in Env-Wq 1502.40; or

(3) Not in accordance with approved plans and specifications.

(d) Any disturbance for which an AOT permit is required which occurs, in whole or in part, prior to the permit being applied for or obtained shall be considered an unpermitted disturbance for which the person undertaking the work shall file an after-the-fact application as specified in Env-Wq 1503.26.

Env-Wq 1503.03 General Permit by Rule. A person shall be deemed to have a general permit by rule to undertake a project in or on the borders of surface waters of the state or that significantly alters the characteristics of the terrain if:

(a) The project is a utility project that meets all of the following conditions:

(1) The project is limited to trench excavation for installing, replacing, or repairing utilities, such as sewer, water, closed drainage systems, gas pipes, or telephone or cable wires;

(2) The project is done by or at the direction of the entity with responsibility for maintaining the lines for which the work is being done;

(3) The trench is cut and covered within the same working day;

(4) The work is conducted in accordance with Env-Wq 1505.04 relative to temporary methods for stormwater management and erosion and sediment control and Env-Wq 1505.05 relative to cold weather site stabilization, as applicable;

(5) All dewatering work associated with the project is covered under an NPDES permit for construction dewatering activities issued by the U.S. Environmental Protection Agency (EPA), if applicable;

(6) A wetlands permit has been obtained pursuant to RSA 482-A prior to any work in areas subject to RSA 482-A jurisdiction; and

(7) Any permit, waiver, or variance required under RSA 483-B has been obtained prior to any work in areas subject to RSA 483-B jurisdiction;

(b) The project is an asphalt maintenance project that meets all of the following conditions:

(1) The project is limited to replacement of the existing asphalt surface to its existing grade;

(2) The project is limited to the footprint of the existing surface;

(3) There is no change in the existing drainage system; and

(4) If base course gravels are replaced, removed base course gravels are replaced at the end of each working day;

(c) The project is a trail project that meets all of the following conditions:

(1) Subject to (6) and (7), below, the trail work is limited to a disturbed area no more than 30 feet wide;

(2) The trail club or organization undertaking the work is recognized by the bureau of trails at the New Hampshire department of resources and economic development (DRED);

(3) The trail is being constructed by DRED or is funded by a grant approved by DRED;

(4) The project is being implemented by a non-profit organization, municipality, or government entity;

(5) The work is done in accordance with Best Management Practices For Erosion Control During Trail Maintenance and Construction, DRED Bureau of Trails, 2004;

(6) If the trail is greater than 20 feet wide, an environmental monitor shall:

a. Inspect the project site at least once every 14 days from the start of terrain alteration activities until all terrain alteration activities are completed and the trail is stabilized;

b. In addition to regular bi-weekly inspections, inspect the project once every 7 days during terrain alteration activities in or within 10 feet of a wetland;

c. In addition to regular bi-weekly inspections, inspect the project site during any rain event in which 0.5 inch of precipitation or more falls within a 24 hour period, provided that if the environmental monitor is unable to be present during such a storm, the monitor shall inspect the site within 24 hours of the rain event; and

d. Submit a written report, by a qualified engineer, a CPESC specialist, a certified wetland scientist, or an employee of the DRED bureau of trails whose job responsibilities include field inspections to the department, within 24 hours of each inspection that:

1. Describes the progress of the project, including whether all conditions in this section are being met; and

2. Includes photographs of the site that are representative of the project; and

(7) If an environmental monitor is required by (6), above, the trail club or organization undertaking the work retains a copy of the report on-site for review during site inspections by federal, state, or local officials.

(d) The project does not qualify under (a) through (c), above, but meets all of the following conditions:

(1) The contiguous area disturbed, as calculated in accordance with Env-Wq 1503.12, is:

a. Less than 50,000 square feet if any of the area disturbed is within the protected shoreland that is subject to RSA 483-B jurisdiction; or

b. Less than 100,000 square feet in which all disturbed areas are outside the protected shoreland that is subject to RSA 483-B jurisdiction;

(2) The project is not a phase of a larger plan of development that cumulatively will exceed the applicable limit specified (1), above;

(3) The project will not disturb any land having a grade of 25% or greater within 50 feet of any surface water;

(4) The work is conducted in accordance with Env-Wq 1505.04 relative to temporary methods for stormwater management and erosion and sediment control and Env-Wq 1505.05 relative to cold weather site stabilization, as applicable;

(5) A wetlands permit has been obtained pursuant to RSA 482-A prior to any work in areas subject to RSA 482-A jurisdiction; and

(6) Any permit, waiver, or variance required under RSA 483-B has been obtained prior to any work in areas subject to RSA 483-B jurisdiction;

(e) The work that requires a permit under Env-Wq 1503.02 also needs to be permitted under RSA 482-A and will not disturb any land having a grade of 25% or greater within 50 feet of any surface water, and review of the AOT permit application would simply duplicate the review that will occur under the RSA 482-A permit application;

(f) The project is limited to transporting forest products as defined in Env-Wq 1502.63; or

(g) The project is limited to subsurface explorations needed to assist in the design of a project for which an AOT permit or general permit is required, including but not limited to test boring, test pits, observation wells, soil surveys, and other site characterization work.

Env-Wq 1503.04 Timber Harvesting Permit by Rule. A person shall be deemed to have a timber harvesting permit by rule to undertake a timber harvesting operation provided that all of the following conditions are met:

(a) The activity is a timber harvesting operation for which the property owner(s), or an agent for the property owner(s), has obtained a valid New Hampshire department of revenue administration intent to cut permit;

(b) As specified in RSA 485-A:17, IV, the work is performed in accordance with the Best Management Practices for Erosion Control on Timber Harvest Operations in New Hampshire published by the New Hampshire department of resources and economic development;

(c) A wetlands permit has been issued or a "Notification of Forest Management or Timber Harvest Activities Having Minimum Wetlands Impact" form has been filed pursuant to RSA 482-A prior to any work in areas in RSA 482-A jurisdiction; and

(d) Timber harvesting roads are not being converted to a non-timber harvesting operational use.

Env-Wq 1503.05 AOT Permit Application Procedures.

(a) Pursuant to RSA 485-A:17, I, an application for an AOT permit shall be filed at least 30 days prior to the proposed starting date of the proposed activities, and no activities shall commence without prior approval of the application by the department.

(b) The applicant for an AOT permit shall submit a complete application, as specified in (c), below, to the department at the following address:

DES Water Division
Attn: Alteration of Terrain Program
29 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095

(c) A complete application shall include:

(1) A completed application checklist as specified in Env-Wq 1503.06, signed as specified in Env-Wq 1503.10;

(2) A completed application form as specified in Env-Wq 1503.07, signed as specified in Env-Wq 1503.10;

(3) The plans and other information specified in Env-Wq 1503.08 and Env-Wq 1503.09, as applicable; and

(4) The fee required by RSA 485-A:17, II based on the area proposed to be disturbed as determined pursuant to Env-Wq 1503.12.

(d) The applicant shall obtain an application form and checklist:

(1) From the department's public information and permitting office;

(2) By requesting the department, by telephone or in writing, to mail an application form and checklist; or

(3) From the department's website.

(e) If any portion of a project is located within 0.25 mile of a river or river segment designated under RSA 483, the applicant shall send a copy of the complete application as described in (c), above, to the appropriate local river advisory committee at the time of filing with the department.

(f) If a copy of the complete application has not already been submitted to each municipality in which the project is proposed, the applicant shall send a copy of the complete application as described in (c), above, to the governing body of the municipality at the time of filing with the department.

Env-Wq 1503.06 Application Checklist. The application checklist required by Env-Wq 1503.05(c)(1) shall comprise a list of all items required to constitute a complete application.

Env-Wq 1503.07 AOT Permit Application Form. The applicant shall provide the following information on or with the application form:

(a) The name, mailing address, and daytime telephone number of the applicant and, if available, the fax number and e-mail address of the applicant;

(b) The name and mailing address of the owner(s) of the property on which the project will occur, if other than the applicant;

(c) If the owner or applicant is a corporation, partnership, trust, or any other entity, the name, mailing address, and daytime telephone number of the individual representing the owner or applicant, and, if available, the fax number and e-mail address of the representative;

(d) The name, mailing address, and daytime telephone number of the engineering consultant for the project, if any, and, if available, the fax number and e-mail address of the consultant;

(e) The town tax map(s) and lot number(s) of the property on which the project is proposed;

(f) The name of all receiving waters as shown on a USGS map or, if unnamed, the name of the waterbody to which the receiving water(s) is tributary, as identified on a USGS map;

(g) A list of other permits required from the department for the project and the status of each permit or permit application, at the time of filing;

(h) A brief description of the proposed project, including an outline of the scope of work to be performed;

(i) Identification of plan type required according to Env-Wq 1503.11;

(j) As applicable, identification of the 100-year floodplain, designated river(s) or river segment(s), state- and federally-listed threatened and endangered species, any surface waters of the state that have been identified by the department as being impaired under 40 CFR 130.7 or 40 CFR 130.8, and any other natural resource(s) that will be or could be adversely impacted by the project;

(k) The total area of disturbance in square feet, calculated in accordance with Env-Wq 1503.12;

(l) The percent effective impervious cover of the project; and

(m) The percent undisturbed cover of the project.

Env-Wq 1503.08 Additional Information Required for AOT Permit Applications. The applicant shall submit the following with the completed application form:

(a) A copy of the appropriate 1:24,000 scale USGS map with the property boundaries delineated;

(b) A copy of the appropriate 1:24,000 scale aerial photograph, dated no earlier than 2003, with the

property boundaries delineated;

(c) A letter from the New Hampshire natural heritage bureau (NHB), which may be obtained using the NHB DataCheck Tool located at http://www.dred.state.nh.us/divisions/forestandlands/bureaus/naturalheritage/, that either:

(1) States that no NH Heritage records were found in the vicinity of the project and the corresponding map with the property boundaries delineated; or

(2) Assesses the potential impacts the project will have, if NH Heritage records were found;

(d) Photographs representative of existing site conditions with a description of what each photograph is showing, referenced to the project plans;

(e) One copy of plans as specified in Env-Wq 1503.11, as applicable for the proposed project, printed on white, 34 to 36 inches wide by 22 to 24 inches high paper;

(f) The proposed construction sequence for the project showing compliance with Env-Wq 1505.02 relative to maximum open area allowed;

(g) For projects that would have additional off-site runoff after development in the absence of stormwater control methods, supporting information required by Env-Wq 1507.02 for determining water quality impacts from developed areas;

(h) For projects that would have additional off-site runoff after development in the absence of stormwater control methods, one copy of the drainage report, drainage area plans, and hydrologic soil group plans prepared in accordance with Env-Wq 1504.08.

(i) For projects requiring a detailed development plan as described in Env-Wq 1504.04, one copy of the inspection and maintenance manual prepared in accordance with Env-Wq 1507.08;

(j) For projects requiring a detailed development plan as described in Env-Wq 1504.04, the submission requirements for determining percent effective impervious cover and percent undisturbed cover in accordance with Env-Wq 1504.14;

(k) For projects within the protected shoreland as defined in RSA 483-B:4, XV, the information required by Env-Wq 1411.01 and a report on the status of the application for a permit under RSA 483-B:5-b or, if the project is exempt, a statement of the statute or rule that exempts the project from needing a permit under RSA 483-B:5-b;

(l) For projects that involve infiltration of stormwater via subsurface leaching or distribution structures, a completed groundwater discharge registration application if required under Env-Wq 402;

(m) If the project is within the 100-year floodplain, a supplementary report as specified in Env-Wq 1503.09; and

(n) For projects that require an excavation, grading, and reclamation plan, as specified in Env-Wq 1504.03, a hydrogeologic report that includes the following:

(1) Description of the subsurface geology to the depth of proposed excavation;

(2) Groundwater elevations; and

(3) Direction of groundwater movement.

Env-Wq 1503.09 Information Required for Projects Within the 100-year Floodplain. The applicant shall submit a supplementary report for all projects proposed within the 100-year floodplain that includes the following:

(a) The size of the river's watershed above the project's furthest downstream boundary;

(b) Photographs of the right bank and left bank;

(c) The Bank Erosion Hazard Index and Near Bank Stress, reported using the Bank Assessment for Non-point Source Consequences of Sediment method, in accordance with Watershed Assessment of River Stability and Sediment Supply by David L. Rosgen, 2006.

(d) A delineation of the 100-year floodplain located within the site's boundaries, using one of the following methods:

(1) In Zone AE, where FEMA has performed detailed studies, the 100-year floodplain boundary shall be determined using FEMA's 100-year floodplain elevations in combination with detailed topography for the site; or

(2) In Zone A, where FEMA has mapped the floodplain by approximate methods, a study to determine 100-year floodplain elevations and boundaries shall be performed in accordance with (f)(1), below;

(e) The total volume of fill in acre-feet that is proposed to be placed within the 100-year floodplain between existing grades and the 100-year flood elevations;

(f) For any project where the total fill volume is greater than 0.5 acre-feet or where a bridge or culvert crossing is proposed, a hydraulic model and analysis check as follows:

(1) A HEC-RAS analysis, stamped by a qualified engineer, that includes cross sections and profiles for the pre- and post-development conditions, wherein the cross sectional surveys and flow data are completed according to the following:

a. A minimum of 6 cross-sections that span the entire river and 100-year floodplain shall be surveyed to analyze the project's affect on flood elevations through the affected reach, where:

1. At least 2 cross-sections are surveyed at the project site in those areas where floodplain encroachment are greatest;

2. At least 2 cross-sections are surveyed upstream of the proposed floodplain fill area with one being located at the upstream property line; and

3. At least 2 cross-sections are surveyed downstream of the proposed floodplain fill area with one being located at the downstream property line;

b. For projects involving bridges or culverts, or both, a minimum of 6 cross-sections shall be required as follows:

1. At least 3 cross-sections shall be surveyed above each proposed bridge or culvert; and

2. At least 3 cross-sections shall be surveyed below each proposed bridge or culvert; and

c. Flood discharges shall be estimated using the first available method listed below:

1. Flood discharges from a FEMA Flood Insurance Studies (FIS) covering the proposed project site, if available; or

2. Stream gauge data collected by the USGS, if available; or

3. The USGS National Flood Frequency (NFF) program for the State of New Hampshire, which uses a regression equation to determine flow; and

(2) A CHECK-RAS analysis to verify the parameters used in the HEC-RAS hydraulic model;

(g) The GPS coordinates of the beginning and end points of each of the cross-sections required by (f)(1)a. and b., above, in units of degrees and decimal minutes of latitude and longitude, with at least 3 decimal places of precision (DDMM.mmm) and referenced to the World Geodetic System 1984 (WGS84) datum or its successor;

(h) If the hydraulic model results indicate that the proposed project will raise flood stages on abutting properties or alter flow and sediment transport characteristics in a manner which could adversely affect channel stability and surface water quality, a proposal for compensatory flood storage or conveyance, or both, that is designed to ensure that:

(1) There is no increase in flood stages on abutting properties; and

(2) Flow and sediment transport characteristics will not be affected in a manner which could adversely affect channel stability; and

(i) For any project where the total fill volume is less than 0.5 acre-feet and no bridge or culvert crossing is proposed:

(1) An on-site cut and fill balance such that there is no net decrease in the 100-year flood storage volume; or

(2) A hydraulic model per the methods described in (f), above, which demonstrates that there is no increase in flood stages on abutting properties and that flow and sediment transport characteristics will not be affected in a manner which could adversely affect channel stability and surface water quality.

Env-Wq 1503.10 Signatures Required.

(a) The applicant(s) or agent and the owner(s) or agent, if other than the applicant(s), shall sign and date the application form.

(b) The signature(s) shall constitute certification that:

(1) The information provided is true, complete, and not misleading to the knowledge and belief of the signer; and

(2) The signer understands that any permit issued based on false, incomplete, or misleading information shall be subject to revocation.

Env-Wq 1503.11 Types of Plans Required.

(a) A land conversion erosion and sediment control plan, as specified in Env-Wq 1504.02, shall be submitted for projects that involve only conversion of non-wetlands forest to open land, provided:

(1) There is no change in the surface contours, except as necessary for temporary and permanent erosion controls;

(2) The land conversion is not a phase of larger development; and

(3) The project does not involve the construction of gravel roads or impervious cover of more than 10,000 square feet.

(b) An excavation, grading, and reclamation plan, as specified in Env-Wq 1504.03, shall be submitted for projects involving only excavation, grading, and reclamation activities.

(c) A detailed development plan, as specified in Env-Wq 1504.04, shall be submitted for all projects requiring an AOT permit other than those covered by (a) or (b), above.

(d) Stormwater drainage area plans and hydrologic soil group plans as specified in Env-Wq 1504.08 shall be submitted for any project that would cause additional off-site runoff in the absence of stormwater control methods.

(e) A source control plan as specified in Env-Wq 1504.07 shall be submitted for any high-load area and any commercial parking area with over 1,000 trip ends per day as determined with reference to Trip Generation, published by Institute of Transportation Engineers, Washington , D.C., 7th Edition, 2003.

Env-Wq 1503.12 Measurement of Contiguous Area Disturbed.

(a) Subject to (b), below, for purposes of determining the need for an AOT permit or the amount of the fee required by RSA 485-A:17, the amount of contiguous area disturbed shall be the sum of the square footage of all areas proposed to be disturbed as part of the total project, including but not limited to areas associated with:

(1) Roads and communal parking areas;

(2) Permanent stormwater controls;

(3) Temporary and permanent methods for protecting water quality;

(4) Utility installation, including wells and septic systems if applicable;

(5) Temporary stockpiles;

(6) Staging areas;

(7) Borrow areas; and

(8) Foundations and lot grading.

(b) For single family or duplex residential subdivisions in which no disturbance on individual lots will occur until after the construction and stabilization of all other items of construction associated with the subdivision are complete, the areas that will be disturbed for individual lot development shall be excluded from the calculation.

(c) Except as provided in (b), above, any actual or proposed terrain disturbance within 10 years before or after the effective date of the issued permit shall be deemed part of the total project and included in the calculation of the amount of contiguous area disturbed.

Env-Wq 1503.13 AOT Permit Applications: Filing and Processing.

(a) Within 14 days after the date an application is received, the department shall determine whether the applicant has submitted everything required by Env-Wq 1503.05(c).

(b) If the application contains everything required by Env-Wq 1503.05(c), the department shall process the application in accordance with RSA 485-A:17, II-b(a) through (d).

(c) Except as provided in (f), below, if the application does not contain everything required by Env-Wq 1503.05(c), the department shall notify the applicant in writing of:

(1) What is missing;

(2) The deadline for submitting the missing components, established based on the type and volume of the missing component(s);

(3) The provisions of Env-Wq 1503.15 relative to submitting the information; and

(4) The provisions of Env-Wq 1503.17 relative to failing to provide the information.

(d) Upon notifying an applicant that the application does not contain everything required by Env-Wq 1503.05(c), the department shall suspend further processing of the application pending receipt of the information missing from the application.

(e) No portion of the time between the date a notice is provided pursuant to (c), above, or (f), below, and the date the applicant responds shall be included in computing the time limits specified in RSA 541-A:29 for processing the application.

(f) The department shall notify the applicant by telephone in lieu of providing a written notice pursuant to (c), above, if:

(1) The anticipated time required of the applicant to supply the missing information is less than the anticipated time required of the department to notify the applicant in writing; and

(2) The department is able to contact the applicant by telephone.

(g) If the department provides notice pursuant to (f), above, the department shall specify in the verbal notice the same information required by (c)(1)-(4), above.

Env-Wq 1503.14 Requests for Additional Information.

(a) After receiving a response to a notice issued pursuant to Env-Wq 1503.13(c) or (f), if the department determines that the application is complete but that the information provided is insufficient for the department to determine whether the criteria of Env-Wq 1503.19 have been met, the department shall

notify the applicant in writing of the additional information believed by the department to be needed to assess the application.

(b) The notice shall specify:

(1) What information is needed;

(2) The deadline for submitting the information, established based on the type and volume of the information needed;

(3) The provisions of Env-Wq 1503.15 relative to submitting the information; and

(4) The provisions of Env-Wq 1503.17 relative to failing to provide the information.

(c) No portion of the time between the date additional information is requested and the date the applicant responds shall be included in computing the time limits for processing the application.

Env-Wq 1503.15 Response to Notice of Missing Information or Request for Additional Information. In responding to any notice under Env-Wq 1503.13(c) or (f) or to any request for additional information under Env-Wq 1503.14 or RSA 485-A:17, II-b(a), the applicant shall:

(a) Specifically identify how each request or comment has been addressed;

(b) If revised plans and specifications are being submitted, call attention to the changes on the revised plans and specifications and add a revision date to each page that has been changed;

(c) Sign the submittal in accordance with Env-Wq 1503.10; and

(d) Send a copy of the response, with a cover letter stating the reason for providing the additional information, to all individuals and entities to whom the applicant was required to provide a copy of the initial application.

Env-Wq 1503.16 Revisions to Applications. Prior to a decision being made on an application, the applicant may substitute a revised plan for the plan submitted with the application if the revisions do not materially alter the scope or nature of the project. If a revision proposed by the applicant materially alters the scope or nature of the project, the applicant shall file a new application.

Env-Wq 1503.17 Failure to Provide Information.

(a) The department shall deny the application if the applicant fails to:

(1) Complete an application within the time specified in the notice sent pursuant to Env-Wq 1503.13(c) or (f), unless the applicant requests an extension of the deadline pursuant to Env-Wq 1509 prior to the deadline and the request is granted;

(2) File a complete response to a request for additional information within the time specified in the request sent pursuant to Env-Wq 1503.14, unless the applicant requests an extension of the deadline pursuant to Env-Wq 1509 prior to the deadline and the request is granted; or

(3) File a complete response to a request for additional information within 120 days of the date of a request sent pursuant to RSA 485-A:17, II-b(a).

(b) A response to a request for additional information sent pursuant to RSA 485-A:17, II-b(a) shall be deemed a complete and timely response for purposes of avoiding the statutory requirement for the department to deny the application if the applicant:

(1) Provides as much information as is reasonably available;

(2) Explains why the remaining information cannot be provided within the specified time; and

(3) Agrees in writing to extend the time for response and the department's review thereof pursuant to RSA 485-A:17, II-b(b)(3).

Env-Wq 1503.18 Notice of Opportunity to Comment on AOT Permit Application.

(a) Upon receipt of a complete application for an AOT permit, the department shall send notice to:

(1) Affected municipalities in accordance with RSA 541-A:39; and

(2) If any portion of the project is located within 0.25 mile of a river or river segment designated under RSA 483, to the rivers coordinator as required by RSA 483:12-a.

(b) The notice sent pursuant to (a) above shall specify the deadline for submittal of comments on the application to the department, as follows:

(1) From a municipality, not sooner than 14 days from the date of the notice; and

(2) From the rivers coordinator, not sooner than 40 days from the date of the notice.

(c) The department shall not act on an application for an AOT permit sooner than deadline specified in the notice sent pursuant to (b), above, unless:

(1) Notified prior to the end of that period by the municipality that the municipality supports the application; and

(2) If applicable, notified prior to the end of that period by the rivers coordinator that the proposed activity would not violate a protection measure as specified in RSA 483:12-a or by the local river advisory committee that the local river advisory committee supports the application.

Env-Wq 1503.19 Criteria for Issuance of AOT Permits. The department shall not issue an AOT permit unless all of the following criteria are met:

(a) Temporary water quality protection measures in accordance with Env-Wq 1505.04 that are adequate to prevent violations of Env-Wq 1700 will be used during the construction phase of the proposed activity and maintained until all areas are stabilized;

(b) The permanent methods for protecting water quality proposed in the application meet the requirements of Env-Wq 1507.02 and are adequate to prevent violations of Env-Wq 1700;

(c) Changes in runoff hydrology, determined in accordance with Env-Wq 1504.08, will be within the limits allowed by Env-Wq 1507.05 and Env-Wq 1507.06;

(d) Cold weather site stabilization measures, as specified in Env-Wq 1505.05, will be implemented as part of the project if applicable;

(e) The project does not use naturally-occurring wetlands to treat or detain stormwater runoff from the proposed development, unless a wetlands permit which specifically allows the impacts has been issued pursuant to RSA 482-A;

(f) There are no violations of RSA 482-A, RSA 483-B, or RSA 485-A on the property for which the project is proposed, or, if violations exist, the applicant agrees to a legally-binding schedule on which the violations will be eliminated and any required restoration will be completed;

(g) The project meets the requirements and intent of RSA 430:53 and Agr 3800 relative to invasive species;

(h) The project has been designed in a manner that will not result in adverse impacts to state- or federally-listed threatened or endangered species or habitat for such species that has been determined by the executive director of the New Hampshire fish and game department to be critical pursuant to RSA 212-A:9, III; and

(i) No reason specified in Env-C 209 exists for denying the permit.

Env-Wq 1503.20 Issuance or Denial of Permits.

(a) The department shall deny the application for an AOT permit if:

(1) The applicant does not submit the components needed to complete the application in response to a notice sent pursuant to Env-Wq 1503.13(c);

(2) The applicant does not submit the additional information requested pursuant to Env-Wq 1503.14; or

(3) The criteria specified in Env-Wq 1503.19 are not met.

(b) If the criteria specified in Env-Wq 1503.19 have been met, the department shall issue an AOT permit to the applicant.

(c) The approved plans and stormwater drainage report and documentation contained in the permit application file shall be considered part of the issued AOT permit.

(d) The issued AOT permit shall include project-specific conditions as necessary to ensure compliance with the requirements of:

(1) RSA 482-A and Env-Wt 100-800 relative to wetlands;

(2) RSA 483-B and Env-Wq 1400 relative to protected shoreland; and

(3) RSA 485-A and Env-Wq 1700 relative to water quality.

(e) Within one week after permit approval, the applicant shall submit a copy of all approved documents to the department in PDF format on portable media that is compatible with current department technology.

(f) Prior to commencing construction, the applicant shall record and submit to the department the easement language for all off-site drainage easements.

Env-Wq 1503.21 Notification; Permit Amendments; Certifications.

(a) The person to whom an AOT permit is issued shall notify the department in writing at least one week prior to the start of construction.

(b) Subject to (d) and (e), below, the project shall be constructed in accordance with the approved plans and specifications.

(c) Upon completion of construction, the permit holder shall submit to the department the following:

(1) A letter from the permit holder certifying that:

a. The project was completed in accordance with the approved plans and specifications; or

b. If deviations from the approved plans and specifications were made, the deviations did not require an amended permit or a new permit;

(2) If any deviations from the approved plans were made, as-built drawings, stamped by a licensed surveyor or qualified engineer, accompanied with a letter, stamped by a qualified engineer, stating that the deviations did not require an amended permit or a new permit and a description of all deviations from the approved plans; and

(3) If any underground detention systems, infiltration systems, or filtering systems were installed, a letter from a qualified engineer stating that the individual observed such system(s) prior to such system(s) being backfilled, and that in his or her professional opinion, such system(s) conform to the approved plans and specifications.

(d) A deviation from the approved plans and specifications may be made without applying for an amended permit or a new permit if Env-Wq 1507.02 and all of the following criteria are met:

(1) The modifications have not and will not result in any changes to wetlands or protected shoreland impacts, unless a wetlands or shoreland permit which specifically allows the impacts has been obtained pursuant to RSA 482-A or RSA 483-B, respectively;

(2) The total impervious area has decreased, remained the same, or increased by the smaller of 5% or 2,500 square feet;

(3) No change is made to a stormwater management system that:

a. Adds any treatment practice, pretreatment practice, groundwater recharge practice, or detention structure; or

b. Increases the peak inflow rate to any treatment practice, pretreatment practice, groundwater recharge practice, or detention structure during the 2-year 24-hour storm;

(4) The roadway centerline has not been relocated or has been relocated to no more than 20 feet from the center line of the roadway as originally approved;

(5) The center point of a parking area has not been relocated or has been relocated to no more than 20 feet from the center point of the parking area as originally approved; and

(6) The center point of a building has not been relocated or has been relocated to no more than 20 feet from the center point of the building location as originally approved.

(e) A deviation from the approved plans and specifications may be made under an amended permit if the criteria specified in (d), above, are exceeded but all of the following criteria are met:

(1) The modifications have not and will not result in any changes to wetlands or protected shoreland impacts, unless a wetlands or shoreland permit which specifically allows the impacts has been obtained pursuant to RSA 482-A or RSA 483-B, respectively;

(2) The total impervious area has not increased by more than the smaller of 10% or 10,000 square feet;

(3) A change is made to a stormwater management system but the peak inflow rate has not increased by more than 1 cfs during the 2-year 24-hour storm;

(4) If the roadway centerline has been relocated, it is no more than 100 feet from the center line of the roadway as originally approved;

(5) If the center point of a parking area has been relocated, it is no more than 100 feet from the center point of the parking area as originally approved; or

(6) If the center point of a building has been relocated, it is no more than 100 feet from the center point of the building location as originally approved.

(f) If deviations from the approved plans and specifications meeting the parameters specified in (e), above, are required, the permit holder shall submit the following to the department prior to making the changes:

(1) A written request to amend the permit;

(2) A description of the necessary changes;

(3) An explanation of why the changes are needed;

(4) Revised plan sheets; and

(5) Revised calculations, if necessary.

(g) The department shall review a request for permit amendment and grant an amended permit if the department determines that the criteria specified in (e), above, are met and the project as modified would have been approved originally. If conditions are necessary to ensure that the project as modified will conform to the requirements of this chapter, the department shall include such conditions.

(h) If the deviations exceed the scope of (e), above, the permit holder shall submit a new application if the permit holder wants to proceed with the project as modified.

Env-Wq 1503.22 Change of Ownership.

(a) Within 10 days of a change of ownership of a site, or any portion thereof, that is subject to an AOT permit and on which any permit-related activities are incomplete, the new owner(s) shall notify the department of the change of ownership by submitting the following:

(1) The name, mailing address, and daytime telephone number of the new owner(s), and, if available, a fax number and e-mail address for the owner(s);

(2) If any new owner is a corporation, partnership, trust, or other entity, the name, mailing address, and daytime telephone number of the individual representing that owner for the project with whom the department can communicate regarding the project and, if available, a fax number and e-mail address for the representative;

(3) The name and mailing address of the former owner(s);

(4) The permit number and site location, including street name(s) and number(s), if any, tax map(s) and lot number(s), and town or city in which the site is located; and

(5) A statement signed by the new owner that the new owner is aware of the requirement for on-going inspection and maintenance of the stormwater management system.

(b) Within 10 days of a change of ownership of a site that was developed for commercial or industrial use under an AOT or site specific permit on which all permit-related activities are complete, the new owner(s) shall notify the department of the change of ownership by submitting the information and statement specified in (a)(1)-(5), above.

(c) Upon receipt of the information required by (a) or (b), above, the department shall amend the permit to reflect the change in ownership and send a copy of the amended permit to the new owner(s).

Env-Wq 1503.23 Permit Expiration and Permit Extension.

(a) Subject to (f), (i), and (j), below, any permit issued under the authority of RSA 485-A:17 on or after the 2009 effective date of Env-Wq 1500 shall expire 5 years from the date of issuance unless the permit holder submits a written request for extension as specified in (d), below, to the department at least 30 days but no more than 90 days prior to the expiration date.

(b) A written request for extension that meets the requirements of (d) and (e), below, and is filed at least 30 days prior to the expiration date shall be timely and sufficient for purposes of RSA 541-A:30, I, such that the permit holder may continue working under the permit until:

(1) If the extension is denied, the last day for seeking judicial review of a denial or a later date fixed by the reviewing court; or

(2) If the extension is granted, the new expiration date specified in the extended permit.

(c) If a written request for extension is not filed at least 30 days prior to the expiration date of the permit or does not meet the requirements of (d) and (e), below, no work shall be done on the project after the expiration of the project's permit. In such cases, if the permit holder wishes to continue the project, the permit holder shall submit an application for a new permit in lieu of an extension request.

(d) A written request for extension shall:

(1) Specify the reason(s) why the extension is being sought;

(2) State whether changes to the original permit application and plans have been, are being, or will be made; and

(3) Include an inspection report prepared by a certified professional erosion and sediment

control specialist (CPESC specialist), or a qualified engineer, that contains:

a. A description of the progress of the project, including whether the project as originally proposed and permitted meets all current requirements for such projects and, if not, which requirements are not being met;

b. If any requirements are not being met, an explanation of the corrective action(s) that will be or are being taken to bring the project into compliance with applicable requirements and the deadline by which such actions will be completed; and

c. Photographs of the site that are representative of the project.

(e) If changes to the original permit have been, are being, or will be made, the permit holder shall identify the changes and, if applicable, submit amended plans meeting the requirements of these rules showing the changes. If the changes meet the criteria of Env-Wq 1503.21 for a permit amendment, the permit holder shall request a permit amendment in addition to a permit extension. If the changes exceed the criteria for a permit amendment, the permit holder shall submit an application for a new permit in lieu of a permit extension and amendment.

(f) Subject to (i), below, permits for excavation, grading, and reclamation projects shall not expire for the life of the project identified in the permit application, provided that the permit holder submits a written update of, and revised plans documenting, the project status every 5 years from the date of the permit. Revised plans shall conform to all technical requirements specified in the rules at the time the permit was issued.

(g) After reviewing an extension request meeting the requirements of (b), above, or (h), below, the department shall extend the permit for a reasonable amount of time, but in no case more than 5 years, based on considerations of the amount of work left to be done on the project and weather or other seasonal factors, if the department determines that:

(1) The requested extension will not violate any statute or rule;

(2) Surface water quality will continue to be protected as under the original permit;

(3) The project is proceeding in accordance with the permit, including all plans approved and made part of the permit;

(4) None of the grounds for suspending or revoking the permit as provided in Env-Wq 1503.24 or for refusing to renew a license as specified in Env-C 209.02 apply to the permit holder; and

(5) An inspection report has been completed and submitted as required by (d)(3), above.

(h) The holder of a permit issued or amended under the authority of RSA 485-A:17 within 2 years prior to the 2009 effective date of Env-Wq 1500, or of a permit issued pursuant to (j), below, may request one extension pursuant to (d), above, without redesigning the project to meet any requirements of these rules that are more stringent than the rules in effect when the permit was issued, provided that no changes that would require a new application under Env-Wq 1503.21(f) have been made or are being proposed. The department shall act on the request as specified in (g), above.

(i) Any permit condition(s) or other requirement(s) relative to implementing and maintaining permanent methods of protecting water quality shall survive:

(1) The expiration of or refusal to renew the permit as provided in this section; and

(2) The suspension or revocation of the permit as provided in Env-Wq 1503.24.

(j) A permit issued after the 2009 effective date of Env-Wq 1500 on the basis of an application filed and reviewed under Env-Wq 1503.01(b) shall expire 2 years from the date of issuance. The holder of such a permit may request one extension pursuant to (h), above.

Env-Wq 1503.24 Suspension or Revocation of Approvals.

(a) For purposes of this section, "approval" means an issued permit or waiver, as applicable.

(b) Upon finding that good cause as specified in (i), below, exists to suspend or revoke an approval, the department shall initiate an action pursuant to RSA 541-A:30, II, RSA 541-A:31, and the provisions of Env-C 200 applicable to adjudicative proceedings to suspend or revoke the approval.

(c) The notice issued to initiate the action shall comply with RSA 541-A:31, III.

(d) The department shall suspend the approval if the department determines, as a result of the proceeding initiated under (b), above, that:

(1) The deficiencies can be corrected such that the project conforms to applicable requirements; and

(2) If the basis for the action is that the information on which the approval was issued was incorrect, incomplete, or misleading:

a. The deficient information was submitted inadvertently or negligently; and

b. The approval would have been issued if correct, complete, and not misleading information had been submitted originally.

(e) If the department suspends the approval, the decision issued pursuant to (h), below, shall:

(1) Specify a reasonable time in which the person to whom the approval was issued may correct the deficiencies which formed the basis for the suspension; and

(2) Notify the person to whom the approval was issued that if the deficiencies are not corrected within the time specified, the approval will be revoked.

(f) A decision to suspend an approval pending receipt of adequate and correct information shall not be considered a final decision from which an appeal may be taken.

(g) The department shall revoke the approval if the department determines, as a result of the proceeding initiated under (b), above, that:

(1) The deficiencies cannot be corrected such that the project conforms to applicable requirements; or

(2) If the basis for the action is that the information on which the approval was issued was incorrect, incomplete, or misleading:

a. The permit holder submitted deficient information with the intent to mislead or to avoid one or more requirements of the statute or rules; or

b. The approval would not have been issued if correct, complete, and not misleading information had been submitted originally.

(h) The department shall issue a written decision to the person to whom the approval was issued. If the approval is suspended or revoked, the decision shall specify the reason(s) for the decision.

(i) Good cause to suspend or revoke an approval shall include the following:

(1) The information on which the approval was based was incorrect, incomplete, or misleading;

(2) The project is not in compliance with the terms of the approval, including the plans approved and made part of the approval; or

(3) The person to whom the approval was issued is a chronic non-complier as defined in Env-C 209.01(b).

Env-Wq 1503.25 Appeal. Any person aggrieved by a final decision of the department to issue or deny a permit or to revoke an approval pursuant to Env-Wq 1500 who wishes to appeal the decision shall appeal to the water council in accordance with Env-WC 200.

Env-Wq 1503.26 After-the-Fact Applications.

(a) Applications received by the department after the work has been initiated or completed shall be subject to:

(1) All requirements which would have applied if the application had been submitted as required by law; and

(2) The additional requirements specified in (c), below.

(b) The department's acceptance or consideration of an after-the-fact application, or issuance of an after-the-fact permit, shall not in any way limit the exercise of any enforcement authority conferred by law on the department, the attorney general, or any other federal, state, or local authority.

(c) In addition to all information required by Env-Wq 1503 and Env-Wq 1504, an after-the-fact application shall include the following:

(1) An erosion control and stabilization plan prepared by a qualified engineer or CPESC specialist;

(2) If the work is on-going, a construction monitoring plan with inspection reports prepared by a qualified engineer or CPESC specialist;

(3) A current conditions plan that clearly identifies all disturbances and construction that was done without a permit;

(4) A description of all prior disturbances on the property; and

(5) An explanation as to why work was done without a permit.

PART Env-Wq 1504 PLANS AND CALCULATIONS

Env-Wq 1504.01 Preparation of Reports and Plans; Scale; Construction Sequence Noted.

(a) Stormwater drainage reports, drainage area plans, hydrologic soil group plans, and any other reports or plans that require the practice of engineering as defined in RSA 310-A:2, III shall:

(1) Be prepared by or under the direct supervision of a qualified engineer;

(2) Bear the signature and seal of the qualified engineer who is responsible for them; and

(3) Be dated.

(b) Plans and soil maps shall be at a scale appropriate to clearly depict the information provided, subject to the following:

(1) If a particular scale is specified in the rule for certain information, that scale shall be used for that information; and

(2) If a detail is not drawn to scale, the detail shall clearly so indicate.

(c) The construction sequence showing compliance with Env-Wq 1505.02 relative to maximum open area shall be noted on the plans so as to clearly inform the contractor of the construction sequence and any limitations contained therein.

(d) Each permit application shall contain only one cohesive set of plans, such that each sheet has the same orientation and continuing sheets clearly show match lines.

Env-Wq 1504.02 Land Conversion Erosion and Sediment Control Plans. Land conversion erosion and sediment control plans shall be drawn at a scale of one inch equals 100 feet, or at a scale that gives greater detail, to show the following:

(a) Existing and proposed contours of the site at 5-foot intervals;

(b) The information specified in Env-Wq 1504.05(a) through (l); and

(c) A seeding or crop planting plan.

Env-Wq 1504.03 Excavation, Grading, and Reclamation Plans. Excavation, grading, and reclamation plans shall be drawn at a scale of one inch equals 100 feet, or at a scale that gives greater detail, to show the following:

(a) Existing and proposed contours of the site at 5-foot intervals;

(b) The information specified in Env-Wq 1504.05; and

(c) Proposed details for site reclamation, including specifications for permanent seeding and any other planned plantings.

Env-Wq 1504.04 Detailed Development Plans. Detailed development plans shall be drawn at a scale of one inch equals 50 feet, or at a scale that gives greater detail to show the following:

(a) Existing and proposed final contours at 2-foot intervals or less;

(b) The information specified in Env-Wq 1504.05; and

(c) Proposed specifications for permanent seeding and any other planned plantings.

Env-Wq 1504.05 Plan Information. The information required on plans shall be as follows:

(a) For the area of activity and within 250 feet, all impervious or otherwise disturbed surfaces including but not limited to roadways, parking areas, borrow areas, and structures, provided that if the applicant does not have survey access to abutting properties or other access to survey information, the information for abutting properties shall be provided using aerial photographs;

(b) All areas on the property for which a permit under RSA 485-A:17, I, was or should have been obtained, with identification of the permit by number if a permit was obtained;

(c) The location(s) and type(s) of existing vegetative cover;

(d) All water features, including but not limited to the direction of water flow, the maximum high-water mark and usual shorelines, the reference line as defined by RSA 483-B, the location of wetlands and surface waters and their banks, including perennial and intermittent streams, vernal pools, tidal buffer zones and designated prime wetlands as identified under RSA 482-A, the limits of the 100-year floodplain, and the 0.25-mile designated river limit as identified under RSA 483;

(e) All drinking water supply well sources, whether private or public, with set-backs as specified in Env-Wq 1508.02;

(f) Soil types;

(g) A clear delineation of the total area to be disturbed, including proposed improvements or modifications;

(h) Proposed temporary methods for protecting water quality in accordance with Env-Wq 1505.04, including devices and timing of implementation for erosion, sediment, and runoff control, that are adequate to prevent violations of the surface water quality standards specified in Env-Wq 1700;

(i) A note on the plans requiring fugitive dust to be controlled in accordance with Env-A 1000;

(j) A note on the plans requiring the project to meet the requirements and intent of RSA 430:53 and Agr 3800 relative to invasive species;

(k) Construction phasing and sequencing that shows the maximum area that can be disturbed at one time in compliance with Env-Wq 1505.02, including but not limited to methods for limiting the length of time of exposure of unstabilized soils;

(l) Proposed cold weather stabilization techniques in accordance with Env-Wq 1505.05, if applicable;

(m) Proposed permanent methods for protecting water quality from degradation due to runoff from any developed land area in accordance with Env-Wq 1507, that are adequate to prevent violations of the surface water quality standards specified in Env-Wq 1700;

(n) Complete storm drainage system, including size, slope, and invert elevations of all pipes and culverts, and detention measures;

(o) A note explaining the intended use of the site or, if the intended use is unknown at the time the permit is issued, a note indicating whether or not local zoning allows for high-load uses and acknowledging that if a high-load use is proposed, the owner or responsible party shall submit a source control plan as per Env-Wq 1504.07 for approval prior to the commencement of operations of a high-load use;

(p) Roadway stations shown every 100 feet; and

(q) If applicable, existing and proposed drainage easement boundaries and maintenance access easement boundaries for proposed methods for protecting water quality as described in Env-Wq 1507.

Env-Wq 1504.06 Deed Restrictions; Easements.

(a) The applicant shall submit the following with the application:

(1) Site plans showing the project boundaries, lot lines, surface waters, drainage system and drainage divides, areas of undisturbed cover, and the location of all existing and proposed impervious areas, including but not limited to roadways, sidewalks, roofs, buildings, and driveways;

(2) Calculations of the percent effective impervious cover (% EIC);

(3) Calculations of the percent undisturbed cover (% UDC); and

(4) If applicable, copies of the recorded deed restrictions or easements per (b), and (c), below.

(b) Subject to (d), below, when the original plans show that the drainage for individual lots or portions of individual lots will be maintained within the individual lot boundary and not connected to the site drainage network, the owner shall create and record deed restrictions for each lot stating that current and future connection of the lot drainage to the site drainage network is prohibited and that all stormwater must be treated, and drainage maintained, on the individual lot.

(c) Subject to (d), below, if the original plans show areas of undisturbed cover (UDC) that will be used to meet antidegradation requirements, the owner shall create and record easements or deed restrictions for each area of UDC stating that current and future development of the UDC areas is prohibited.

(d) The requirements of (b) and (c), above, shall not apply to activities that require an excavation, grading, and reclamation plan if no permanent structures will be built.

Env-Wq 1504.07 Source Control Plans.

(a) A source control plan, where required, shall be designed to:

(1) Minimize the volume of stormwater coming into contact with regulated substances; and

(2) Segregate relatively clean stormwater from stormwater with a higher concentration of pollutants.

(b) The owner of a site from which stormwater will discharge that requires an NPDES permit as defined under 40 CFR 122.26 may submit a stormwater pollution prevention plan (SWPPP) to meet the requirements of this section for a source control plan if such SWPPP identifies:

(1) The location(s) of groundwater protection areas, if any, within 1,000 feet of the site

perimeter; and

(2) Procedures and practices to protect groundwater quality.

(c) The source control plan may exclude the items described in (d)(2) through (d)(10), below, if:

(1) The plan demonstrates that the site is designed in a manner that will prevent the exposure of regulated substances to precipitation or runoff, taking into account the possibility of accidental spills; or

(2) The plan covers only a commercial parking lot where the only regulated substance exposed to rainfall or runoff is road salt that has been applied for deicing of pavement on the site.

(d) A source control plan shall consist of:

(1) An overview of how source controls, including structural or operational management practices, will prevent or minimize the amount of regulated substances from mixing with clean stormwater;

(2) A list of regulated substances expected to be present on the site in quantities of 5 gallons or more;

(3) The location(s) of groundwater protection areas, if any, within 1,000 feet of the site perimeter;

(4) A plan depicting the drainage area with exposed regulated substances and the location(s) of stormwater practice(s) or discharge point(s) serving those areas, including latitude-longitude point(s) of the practice or discharge point(s) to within plus or minus 5 meters of the practice or discharge point;

(5) The location(s) and containment method(s) to be employed for storage of regulated substances;

(6) A plan depicting the location(s) where regulated substances will be handled, including the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product;

(7) A plan showing the location(s) of snow storage areas;

(8) A description of spill prevention and control or containment measures;

(9) A list of the phone numbers and mailing addresses of the owner of the facility; and

(10) A program of training to familiarize employees with the plan and to ensure its implementation.

(e) The owner of a site that is subject to an AOT permit required under Env-Wq 1503.02 and requiring a source control plan under this section shall certify once every 3 years on a form supplied by the department and returned to the department that the site is in compliance with its permit with respect to the implementation of its source control plan.

Env-Wq 1504.08 Stormwater Drainage Report, Drainage Area Plans, and Hydrologic Soil Group Plans. A stormwater drainage report, associated drainage area plans, and associated hydrologic soil group

plans shall include the following:

(a) A narrative with the following information:

(1) A description of the pre-development and post-development conditions affecting drainage;

(2) The total impervious area assumed per lot, if applicable;

(3) A discussion of how the proposed development impacts the downstream surface waters and properties;

(4) A comparison between the pre-development peak discharge rates and the post-development peak discharge rates, for the one, 2, 10, and 50-year, 24-hour storms;

(5) A discussion of how treatment criteria is met in accordance with Env-Wq 1507.03; and

(6) A discussion of how groundwater recharge is met in accordance with Env-Wq 1507.04;

(b) Calculations for pre- and post-construction stormwater drainage, for 24-hour duration storms with minimum return frequencies of once in one year, 2 years, 10 years, and 50 years using Technical Release 20 (TR20) or Technical Release 55 (TR55), developed by the NRCS for determining the rate of runoff, subject to the following:

(1) The time of concentration shall be determined as follows:

a. If using the Lag method for determining the time of concentration, identify the hydraulic length in feet and provide calculations for determining the average land slope in percent for each sub-basin; or

b. If using the TR-55 method for determining the time of concentration, identify the sheet flow path(s), the shallow concentrated flow path(s), and the channel flow path(s) for each sub-basin; and

c. Sheet flow shall be limited to 100 feet; and

(2) The curve number for each sub-basin shall be calculated as follows:

a. For proposed areas of disturbance, including lot development, the hydrologic condition for woods, meadows, or pastures shall be assumed to be “good”;

b. For proposed areas of disturbance, including lot development, soil types shall be identified in accordance with:

1. The Society of Soil Scientists of Northern New England (SSSNNE) Special Publication No. 1, High Intensity Soil Maps for New Hampshire - Standards, September 2006; or

2. SSSNNE Special Publication No. 3, Site-Specific Soil Mapping Standards for New Hampshire and Vermont, December 2006; and

c. For all other areas that contribute runoff to the project site, soil types shall be identified in accordance with:

1. The NRCS county-wide web soil survey as found at http://websoilsurvey.nrcs.usda.gov;

2. SSSNNE Special Publication No. 1, High Intensity Soil Maps for New Hampshire - Standards, September 2006; or

3. SSSNNE Special Publication No. 3, Site-Specific Soil Mapping Standards for New Hampshire and Vermont, December 2006;

(c) WQV, WQF, and GRV calculations;

(d) Calculations for designing outlet protection;

(e) Drainage area plans for pre- and post-construction that delineate each sub-basin, including off-site areas which flow onto the project area, at a scale for off-site areas of one inch equals 100 feet, or at a scale of one inch equals 2,000 feet if delineated from a USGS map, and at a scale of one inch equals 50 feet for on-site areas, identifying the following:

(1) The location of sub-basins, reaches, ponds, and all points of interest, as modeled in the stormwater drainage report;

(2) The hydraulic length or time of concentration flow path;

(3) Contours for on-site areas at the same intervals as the plans prepared pursuant to Env-Wq 1504.03 or Env-Wq 1504.04, as applicable and contours for off-site areas at the same or lesser intervals as the applicable USGS map;

(4) Roadway station numbering, if applicable; and

(5) Drainage structures such as detention basins, culverts, and treatment practices;

(f) If the plans prepared pursuant to (e), above, for the on-site areas comprise more than 3 sheets at the specified scale, an overview sheet which shows the location of each 50-foot scale sheet and an outline of the area to be impacted by the proposed project; and

(g) Hydrologic soil group plans for pre- and post-construction that delineate each sub-basin, including off-site areas which flow onto the project area, identifying the following:

(1) The location of sub-basins, as modeled in the stormwater drainage report;

(2) If hydrologic soil groups are determined in accordance with (b)(2)b., (b)(2)c.2., or (b)(2)c.3., above, the locations of the different soil groups using the following color-coding:

a. Hydrologic soil group A soils shall be shaded green;

b. Hydrologic soil group B soils shall be shaded yellow;

c. Hydrologic soil group C soils shall be shaded orange;

d. Hydrologic soil group D soils shall be shaded red;

e. Open water features shall be shaded blue; and

f. Impervious cover shall be shaded gray;

(3) If hydrologic soil groups are determined in accordance with (b)(2)c.1., the locations of the different soil groups using the color-coding assigned by the NRCS;

(4) The map symbol identifying the soil mapped; and

(5) A map legend.

Env-Wq 1504.09 Calculation of Water Quality Volume (WQV). Water quality volume (WQV) shall be calculated using the Unified Sizing Criteria as follows:

(a) "P" means one inch of rainfall;

(b) "A" means the total area draining to the design structure;

(c) "I" means the percent impervious area draining to the design structure, in decimal form;

(d) "Rv" means the unitless runoff coefficient calculated as the sum of 0.05 plus the product of I multiplied by 0.9, as in the formula below:

$$Rv = 0.05 + (0.9 \times I)$$

(e) To calculate the WQV, the applicant shall multiply the product of Rv and A by P, as shown in the formula below:

$$WQV = P \times A \times Rv$$

Env-Wq 1504.10 Calculation of Water Quality Flow (WQF).

(a) "WQV" means water quality volume calculated in accordance with Env-Wq 1504.09.

(b) "q_u" means the unit peak discharge from TR-55 exhibits 4-II and 4-III, using the values for P, A, Q, CN, S, and Ia as described in (c) through (h), below.

(c) "P" as used in TR-55 exhibits 4II and 4-III and for the calculation of CN in (f), below, means one inch of rainfall.

(d) "A" as used for the calculation of Q in (e), below, means the total area draining to the design structure.

(e) "Q" as used for the calculation of CN in (f), below, means the water quality depth, calculated as WQV divided by A, as shown in the formula below:

$$Q = WQV / A$$

(f) "CN" as used for the calculation of S in (g), below, is the unit peak discharge curve number, calculated by dividing 1000 by the value obtained by adding 10 to 5 times P and adding 10 times Q, and then subtracting 10 times the value obtained by adding Q squared to the product of 1.25 times Q times P and raising the sum to the 0.5 power, as shown in the formula below:

$$CN = 1000 / (10 + 5P + 10Q - 10 \times [Q^2 + 1.25 \times Q \times P]^{0.5})$$

(g) "S" as used for the calculation for Ia in (h), below, means the potential maximum retention in inches, calculated by subtracting 10 from the value obtained by dividing 1000 by CN, as shown in the formula below:

$$S = (1000 / CN) - 10$$

(h) "Ia" as used in TR-55 exhibits 4-II and 4-III means the initial abstraction, calculated by multiplying 0.2 by S, as shown in the formula below:

$$Ia = 0.2 \times S$$

(i) To calculate the WQF, the applicant shall multiply q_u by WQV, as shown in the formula below:

$$WQF = q_u \times WQV$$

Env-Wq 1504.11 Calculation of Groundwater Recharge Volume (GRV).

(a) "GRV" means the groundwater recharge volume.

(b) "A_I" means the total area of impervious cover that will exist on the site after development minus the area of any impervious cover that existed on the site prior to the development that were not disturbed.

(c) "R_d" means the groundwater recharge depth based on the NRCS hydrologic soil group, as follows, subject to (d), below:

(1) For hydrologic soil group A, the R_d shall be 0.40 inches;

(2) For hydrologic soil group B, the R_d shall be 0.25 inches;

(3) For hydrologic soil group C, the R_d shall be 0.10 inches; and

(4) For hydrologic soil group D, recharge shall not be required.

(d) Where more than one hydrologic soil group is present, a weighted recharge depth shall be computed based on the area of each soil group present.

(e) The applicant shall calculate the GRV by multiplying A_I by Rd, as shown in the formula below:

$$GRV = A_I \times R_d$$

Env-Wq 1504.12 Site Evaluation Report. A site evaluation report shall contain the following:

(a) The location of the practice;

(b) A description of the existing topography at the location of the practice;

(c) The locations of the test pits or borings which constitute the following required number of test pits or borings:

(1) At least one test pit in each infiltration basin area of less than 2,500 square feet;

(2) At least 2 test pits in each infiltration basin area of 2,500 square feet or greater, with an

additional one test pit or boring in every 10,000 square feet of infiltration basin area; or

(3) At least one test pit in each infiltration trench with an additional one test pit or boring in every 100 linear feet of trench;

(d) The elevation of the location of the seasonal high water table (SHWT) and bedrock, if within 5 feet below the base of the practice;

(e) Profile descriptions written in accordance with the descriptive procedures, terminology and interpretations found in the Field Book for Describing and Sampling Soils, Version 2.0, USDA, NRCS, 2002;

(f) A plan showing the soil series for the soils at the location of the proposed practice and within 100 feet of the area's perimeter, in accordance with the Society of Soil Scientists of Northern New England (SSSNNE) Special Publication No. 3, Site-Specific Soil Mapping Standards for New Hampshire and Vermont, December 2006;

(g) The number and location of test locations, as specified in Env-1504.13(f), and the number of repetitions at each testing location;

(h) The date(s) on which data was collected; and

(i) A summary of the design infiltration rate results as determined from Env-Wq 1504.13.

Env-Wq 1504.13 Calculation of the Design Infiltration Rate.

(a) The method for determining the design infiltration rate of the soils in which the practice will be placed shall be as follows:

(1) Subject to (b), below, for existing natural or manmade soils, the applicant shall use the selected default values as presented in (c), below, or the results from the field measurement method described in (d), below; or

(2) For proposed fill, the applicant shall use the results from the laboratory testing method described in (g), below, as confirmed after the fill is placed but before the practice is installed by results from field measurement method described in (d), below.

(b) If an infiltration practice used to meet the stormwater treatment requirements in accordance with Env-Wq 1507.03 infiltrates into one or more of the following soils, the applicant shall use the results from the field measurement method described in (d), below: Abenaki, Adams, Agawam, Boscawen, Caesar, Champlain, Colton, Croghan, Deerfield, Haven, Hermon, Hinckley, Hoosic, Metallak, Quonset, and Warwick.

(c) The default values for the design infiltration rate shall be as follows:

(1) Using NRCS data from Soil Data Mart, record the saturated hydraulic conductivity (Ksat) for the lowest Ksat value in the range for the most limiting layer located below the proposed bottom of the practice;

(2) Where more than one soil series is present, compute a weighted Ksat based on the area of each soil series present; and

(3) Multiply the recorded Ksat value by 0.5 and use the result as the default design infiltration rate.

(d) The field measurement method for determining the design infiltration rate shall be as follows:

(1) Using one of the methods as described in (e), below, perform the test the specified number of times in a location and, if the specified number is greater than one, average the results, then move to the next test location and repeat; and

(2) After obtaining an average infiltration rate for each of the requisite number of locations as specified in (f), below, average the results and multiply the result by 0.5 to obtain the design rate.

(e) The Ksat shall be measured by a certified soil scientist, professional geologist, qualified engineer, or other qualified professional licensed to practice in the state of New Hampshire, using one of the following:

(1) A Guelph Permeameter, per the manufacturer's instructions, which shall be done at least 2 additional times, for a minimum of 3 observations in each location;

(2) A Compact Constant Head Permeameter, per the manufacturer's instructions, which shall be done at least 2 additional times, for a minimum of 3 observations in each location;

(3) A Double Ring Infiltrometer, in accordance with ASTM 3385 standards and using an inner ring that is at least 12 inches in diameter, which shall be done at least one time, for a minimum of one observation in each location; or

(4) A Borehole Infiltration test, in accordance with the following protocol:

a. Install a solid 4- to 6-inch diameter by 30-inch long casing to a depth of 24 inches below the proposed bottom of the practice;

b. Remove any smeared soil surfaces and provide a natural soil interface into which water can percolate;

c. Remove all loose material from inside the casing;

d. Fill the casing with water to a depth of 24 inches and allow to pre-soak for 24 hours;

e. After pre-soaking in accordance with d., refill the casing with 24 inches of water and record the drop in water level from the top of the casing at the end of one hour;

f. Divide the drop in water elevation by one hour to obtain the infiltration rate for the given observation;

g. Repeat e. and f., above, at least 3 additional times, for a minimum of 4 observations in each location; and

h. Use the lower of the average of the calculated infiltration rates or the last observation.

(f) The number and location of test locations shall be as follows:

(1) Locate the field tests within the footprint of the proposed practice, sufficiently spaced apart

to be representative of the overall conditions;

(2) Conduct the test at the base elevation of the proposed practice;

(3) For infiltration basins, perform:

a. One field test in every 2,500 square feet of infiltration basin area if no manmade soils are present; or

b. One field test in every 1,000 square feet of infiltration basin area for infiltration basins to be located on existing manmade soils; and

(4) For infiltration trenches, perform:

a. One field test in every 100 linear feet of the infiltration trench area if no manmade soils are present; or

b. One field test in every 50 linear feet of the infiltration trench area for infiltration trenches to be located on existing manmade soils.

(g) The laboratory method for determining the design infiltration rate for proposed fill soils shall be as follows:

(1) Determine the Ksat of the proposed fill in accordance with test methods described in ASTM D-2434, "Standard Test Method for Permeability of Granular Soils (Constant Head)" or ASTM D-5856, "Standard Test Method for Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-Wall, Compaction-Mold Permeameter"; and

(2) Apply a minimum factor of safety by multiplying the representative Ksat by 0.5 and use the result as the design infiltration rate.

(h) The limitations on discharging stormwater into the ground shall be as follows:

(1) Infiltration practices are prohibited in the areas listed in Env-Wq 1508.05(a);

(2) Filtering practices are prohibited in the areas listed in Env-Wq 1508.06(b); and

(3) Groundwater recharge is prohibited in the areas listed in Env-Wq 1507.04(e).

Env-Wq 1504.14 Calculation of Percent Effective Impervious Cover (% EIC) and Percent Undisturbed Cover (% UDC).

(a) The applicant shall calculate the percent effective impervious cover (%EIC) by dividing the area of effective impervious cover within the property on which the project will occur by the drainage area within the property, using equal units of measure and multiplying the result by 100.

(b) The applicant shall calculate the percent undisturbed cover (%UDC) by dividing the area of undisturbed cover within the property on which the project will occur by the drainage area within the property, using equal units of measure and multiplying the result by 100.

PART Env-Wq 1505 REQUIREMENTS TO PROTECT WATER QUALITY DURING TERRAIN ALTERATION ACTIVITIES

Env-Wq 1505.01 Water Quality Degradation Prohibited. No person undertaking any terrain-alteration activity shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards established in Env-Wq 1700.

Env-Wq 1505.02 Maximum Open Area Allowed.

(a) All areas of unstabilized soil shall be:

(1) Temporarily stabilized as soon as practicable but no later than 45 days of initial disturbance, unless a shorter time is specified by local authorities, the construction sequence approved as part of the issued permit, or an independent monitor; and

(2) Permanently stabilized as soon as practicable but no later than 3 days of final grading.

(b) Except as further limited by (e), below, the area of unstabilized soil shall not exceed 5 acres at any time unless the applicant:

(1) Submits documentation that the required areas of earth cuts and fills are such that an area of disturbance of 5 acres or less would unreasonably limit the construction schedule;

(2) Submits a construction sequence plan, developed by a qualified engineer or a CPESC specialist; and

(3) Employs an environmental monitor during construction.

(c) Subject to (d) below, the environmental monitor shall:

(1) Inspect the project site at least once each week from the start of terrain alteration activities until all terrain alteration activities are completed and the site is stabilized;

(2) In addition to regular weekly inspections, inspect the project site during any rain event in which 0.5 inch of precipitation or more falls within a 24 hour period, provided that if the environmental monitor is unable to be present during such a storm, the monitor shall inspect the site within 24 hours of the rain event;

(3) Submit a written report, stamped by a qualified engineer or a CPESC specialist, to the department within 24 hours of each inspection that:

a. Describes the progress of the project, including whether all conditions of the permit are being met and, if not, which requirements are not being met;

b. If any requirements are not being met, an explanation of the corrective action(s) that will be or are being taken to bring the project into compliance with applicable requirements and the deadline by which such actions will be completed; and

c. Includes photographs of the site that are representative of the project; and

(4) Retain a copy of the report prepared pursuant to (3), above, on-site for review during site inspections by federal, state, and local officials.

(d) Routine inspection frequency may be reduced from once each week to at least once each month if either of the following conditions is met:

(1) Work has been suspended and the entire site is stabilized in accordance with Env-Wq 1505.03; or

(2) Runoff is unlikely because:

a. The ground is frozen or the site is covered with snow or ice; and

b. The project is in an area where frozen conditions are anticipated to continue for more than one month.

(e) If the site is within 50 feet of surface water, has a grade of 25% or greater, or contains soils having an erodibility factor of 0.4 or greater, or any combination of these, the owner shall comply with (b) through (d), above, regardless of the size of the open area.

Env-Wq 1505.03 Stabilization. A site shall be deemed to be stabilized when it is in a condition in which the soils on the site will not erode under the conditions of a 10-year storm, such as but not limited to:

(a) In areas that will not be paved, a minimum of 85% vegetative cover has been established, a minimum of 3 inches of non-erosive material such as stone or riprap has been installed, or erosion control blankets have been installed in accordance with Env-Wq 1506.03; or

(b) In areas to be paved, base course gravels meeting the gradation requirements of NHDOT Standard Specification for Road and Bridge Construction, 2006, Item No. 304.1 or 304.2 have been installed.

Env-Wq 1505.04 Stormwater Management and Erosion and Sediment Control. The methods described in Env-Wq 1506.01 through Env-Wq 1506.13, used individually or in combination to meet the requirement of Env-Wq 1505.01, shall be acceptable methods for minimizing pollutant discharges from any terrain-alteration project, including projects that are subject to Env-Wq 1503.03 relative to general permits by rule, from the time that work starts on a project until the site is permanently stabilized, provided that the methods:

(a) Shall be considered as minimum standards, with the more protective requirements applying, for projects subject to Env-Wq 1503.05; and

(b) Are implemented in accordance with the individual criteria specified for each method.

Env-Wq 1505.05 Cold Weather Site Stabilization.

(a) To adequately protect water quality during cold weather and during spring runoff, the additional stabilization techniques specified in this section shall be employed during the period from November 30 through May 1.

(b) The area of exposed, unstabilized soil shall be limited to one acre and shall be protected against erosion by the methods described in this section prior to any thaw or spring melt event. The allowable area of exposed soil may be increased if a winter construction plan, developed by a qualified engineer or a CPESC specialist, is reviewed and approved by the department.

(c) All proposed vegetated areas having a slope of less than 15% which do not exhibit a minimum of 85% vegetative growth by November 30, or which are disturbed after November 30, shall be seeded and

covered with 3 to 4 tons of hay or straw mulch per acre secured with anchored netting or tackifier, or 2 inches of erosion control mix meeting the criteria of Env-Wq 1506.05(d) through (h).

(d) All proposed vegetated areas having a slope of greater than 15% which do not exhibit a minimum of 85% vegetative growth by November 30, or which are disturbed after November 30, shall be seeded and covered with a properly installed and anchored erosion control blanket or with a minimum 4 inch thickness of erosion control mix meeting the criteria of Env-Wq 1506.05(d) through (h).

(e) Installation of anchored hay mulch or erosion control mix, meeting the criteria of Env-Wq 1506.05(d) through (h), shall not occur over snow of greater than one inch in depth.

(f) Installation of erosion control blankets shall not occur over snow of greater than one inch in depth or on frozen ground.

(g) All proposed stabilization in accordance with (c) or (d), above, shall be completed within a day of establishing the grade that is final or that otherwise will exist for more than 5 days.

(h) All ditches or swales which do not exhibit a minimum of 85% vegetative growth by November 30, or which are disturbed after November 30, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions, as determined by the owner's engineering consultant.

(i) After November 30, incomplete road or parking areas where active construction of the road or parking area has stopped for the winter season shall be protected with a minimum 3 inch layer of base course gravels meeting the gradation requirements of NHDOT Standard Specification for Road and Bridge Construction, 2006, Item No. 304.1 or 304.2.

PART Env-Wq 1506 METHODS FOR EROSION AND SEDIMENT CONTROL DURING TERRAIN ALTERATION ACTIVITIES

Env-Wq 1506.01 Erosion Control Methods: Temporary and Permanent Mulching. Mulching shall be used only as follows:

(a) Hay and straw mulches shall be anchored with mulch netting or tackifier so that they are not blown away by wind or washed away by flowing water;

(b) Mulch materials shall be selected based upon soils, slope, flow conditions, and time of year;

(c) Hay or straw mulch shall be applied at a rate of 1.5 to 2 tons per acre or 70 to 90 pounds per 1,000 square feet;

(d) Wood chips or ground bark shall be applied at 2 to 6 inches deep at a rate of 10 to 20 tons per acre or 460 to 920 pounds per 1,000 square feet;

(e) Jute and fibrous mats and wood excelsior shall be installed according to manufacturer's instructions; and

(f) Erosion control mix meeting the criteria of Env-Wq 1506.05(d) through (h) shall be placed at a minimum thickness of 2 inches.

Env-Wq 1506.02 Erosion Control Methods: Vegetation. Vegetating disturbed areas shall be completed only as follows:

(a) Stones and trash shall be removed so as not to interfere with the seeding area;

(b) On slopes 4:1 or steeper, the final preparation shall include creating horizontal grooves perpendicular to the direction of the slope to catch seed and reduce runoff;

(c) If applicable, fertilizer and organic soil amendments shall be applied during the growing season;

(d) Fertilizer shall be restricted to a low phosphate, slow release nitrogen fertilizer when applied to areas within 100 feet of any river, stream, pond, or lake, and areas that are subject to the provisions of RSA 483-B, the Comprehensive Shoreland Protection Act (CSPA), shall meet the minimum standards of the CSPA;

(e) Runoff shall be diverted from the seeded area;

(f) Subject to (g) below, seeding shall occur prior to September 15th;

(g) Areas seeded between May 15th to August 15th shall be covered with hay or straw mulch meeting the criteria of Env-Wq 1506.01(a) through (c); and

(h) Vegetated growth covering at least 85% of the disturbed area shall be achieved prior to October 15th.

Env-Wq 1506.03 Erosion Control Methods: Temporary Erosion Control Blankets. Blankets shall be used only as follows:

(a) Blankets shall be installed per the manufacturer's specifications;

(b) Blankets shall be placed within 24 hours after sowing seed in that area;

(c) Stones and trash shall be removed so as not to interfere with the seeding area;

(d) Blankets shall be anchored at the top of the slope in a trench per the manufacturer's instructions;

(e) Blankets shall be unrolled in the direction of the water flow, overlapping the edges and stapling per the manufacturer's instructions; and

(f) Blankets shall be laid loosely over the soils, maintaining contact with the soil, and not stretched.

Env-Wq 1506.04 Sediment Control Methods: Silt Fences. Silt fences shall be used only as follows:

(a) Fences shall be used in areas where erosion will occur only in the form of sheet erosion and there is no concentration of water in a channel or drainage way above the fence;

(b) The maximum contributing drainage area above the fence shall be less than ¼-acre per 100 linear feet of fence;

(c) The maximum length of slope above the fence shall be 100 feet;

(d) The maximum slope above the fence shall be 2:1;

(e) Fences shall be installed as follows:

(1) Fences shall follow the contour of the land as closely as possible;

(2) The ends of the fence shall be flared up-slope;

(3) The fabric shall be embedded a minimum of 4 inches in depth and 4 inches in width in a trench excavated into the ground, or if site conditions include frozen ground, ledge, or the presence of heavy roots, the base of the fabric shall be embedded with a minimum thickness of 8 inches of ¾-inch stone;

(4) The soil shall be compacted over the embedded fabric;

(5) Support posts shall be sized and anchored according to the manufacturer's instructions; and

(6) Adjoining sections of the fence shall be overlapped by 6 inches, folded and stapled to a support post;

(f) Fences shall be inspected and maintained immediately after each rainfall and at least daily during prolonged rainfall; and

(g) Sediment deposition shall be removed, at a minimum, when deposition accumulates to one-third the height of the fence.

Env-Wq 1506.05 Sediment Control Methods: Erosion Control Mix Berms. Erosion control mix berms shall be used only as follows:

(a) Berms shall be used in areas where erosion will occur only in the form of sheet erosion and there is no concentration of water in a channel or drainage way above the berm;

(b) The berms shall be installed following the contour of the land as closely as possible;

(c) The berms shall not be used unless the area upslope of the berm has a slope of less than 5%;

(d) Subject to (e), below, the mix shall have an organic portion between 25% and 65%, dry weight basis, and be fibrous and elongated such as from shredded bark, stump grindings, composted bark, or equivalent manufactured products;

(e) Wood and bark chips, ground construction debris, or reprocessed wood products shall not be used as the organic material;

(f) The mix shall not contain silts, clays, or fine sands;

(g) The mix shall have a particle size by weight of 100% passing a 3-inch screen, 90% to 100% passing a 1-inch screen, 70% to 100% passing a 0.75-inch screen, and 30% to 75% passing a 0.25-inch screen;

(h) The mix pH shall be between 5.0 and 8.0; and

(i) The berm shall be at least 12 inches high and at least 2 feet wide.

Env-Wq 1506.06 Sediment Control Methods: Straw or Hay Bale Barriers. Straw or hay bale barriers shall be used only as follows:

(a) The barriers shall be used in areas where erosion will occur only in the form of sheet erosion and there is no concentration of water in a channel or drainage way above the barrier;

(b) The maximum contributing drainage area above the barrier shall be less than 1/4 acre per 100 linear feet of barrier;

(c) The maximum length of slope above the barrier shall be 100 feet;

(d) The maximum slope above the barrier shall be 2:1;

(e) The barriers shall be installed as follows:

(1) The barriers shall follow the contour of the land as closely as possible;

(2) The ends of the barrier shall be flared up slope;

(3) The bale ends shall be tightly adjoined;

(4) Each bale shall be embedded at least 4 inches into the ground; and

(5) A minimum of 2 anchoring stakes per bale shall be used, penetrating at least 18 inches into the ground;

(f) The barriers shall be inspected and maintained immediately after each rain fall and at least daily during prolonged rainfall; and

(g) Sediment deposition shall be removed, at a minimum, when deposition accumulates to one-third the height of the barrier.

Env-Wq 1506.07 Sediment Control Methods: Temporary Check Dams. Temporary check dams shall be used only as follows:

(a) The maximum contributing drainage area to the dam shall be less than one acre;

(b) The maximum height of the dam shall be 2 feet;

(c) The center of the dam shall be at least 6 inches lower than the outer edges;

(d) The maximum spacing between the dams shall be such that the toe of the upstream dam is at the same elevation as the overflow elevation of the downstream dam;

(e) The dam shall not be used in a flowing stream;

(f) The dams shall be checked after each rainfall and at least daily during prolonged rainfall and necessary repairs shall be made immediately;

(g) Hay bale check dams shall be embedded into the ground at least 4 inches but no more than 6 inches;

(h) Stone check dams shall be constructed of a well-graded angular 2-inch to 3-inch stone; and

(i) Timber check dams shall be constructed of 4-inch to 6-inch logs and embedded at least 18 inches deep into the soil.

Env-Wq 1506.08 Sediment Control Methods: Temporary Catch Basin Inlet Protection. Temporary catch basin inlet protection measures shall be used only as follows:

(a) The maximum contributing drainage area to the trap shall be less than one acre;

(b) If hay bales are used, the following requirements also shall be met:

(1) The bale ends shall be tightly adjoined;

(2) Each bale shall be embedded at least 4 inches into the ground; and

(3) A minimum of 2 anchoring stakes per bale shall be used, penetrating at least 18 inches into the ground.

(c) If a gravel and wire mesh filter is used, the following requirements shall be met:

(1) The wire mesh shall be placed over the drop inlet so that the entire opening and a minimum of 12 inches around the opening are covered by the mesh;

(2) The wire mesh shall be hardware cloth or wire with openings up to one half inch;

(3) The gravel filter shall be clean coarse aggregate;

(4) The gravel shall be at least 18 inches on all sides of the drain opening; and

(5) The gravel shall be at least 12 inches in depth.

(d) If a concrete block and gravel drop inlet sediment filter is used, the following requirements shall be met:

(1) The blocks shall be placed lengthwise in a single row around the perimeter of the inlet;

(2) The block ends shall abut one another;

(3) A hardware cloth or wire mesh shall be placed over the openings of the concrete blocks and extend at least 12 inches around the opening to prevent aggregate from being transported through the openings in the blocks;

(4) The gravel filter shall be clean coarse aggregate;

(5) The gravel shall be placed against and along the outside edges of the blocks; and

(6) The gravel filter shall be a minimum of 12 inches high and no more than 24 inches high.

Env-Wq 1506.09 Sediment Control Methods: Temporary Construction Exits. Temporary construction exit(s), also called anti-tracking pads, shall be used only as follows:

(a) The minimum stone used shall be 3-inch crushed stone;

(b) The minimum length of the pad shall be 75 feet, except that the minimum length may be reduced to 50 feet if a 3-inch to 6-inch high berm is installed at the entrance of the project site;

(c) The pad shall extend the full width of the construction access road or 10 feet, whichever is

greater;

(d) The pad shall slope away from the existing roadway;

(e) The pad shall be at least 6 inches thick;

(f) A geotextile filter fabric shall be placed between the stone pad and the earth surface below the pad; and

(g) The pad shall be maintained or replaced when mud and soil particles clog the voids in the stone such that mud and soil particles are tracked off-site.

Env-Wq 1506.10 Sediment Control Methods: Temporary Sediment Trap. Temporary sediment trap shall be used only as follows:

(a) The trap shall be installed as close to the disturbed area or source of sediment as possible;

(b) The maximum contributing drainage area to the trap shall be less than 5 acres;

(c) The minimum volume of the trap shall be 3,600 cubic feet of storage for each acre of drainage area;

(d) The side slopes of the trap shall be 3:1 or flatter, and shall be stabilized immediately after their construction;

(e) The outlet of the trap shall be a minimum of one foot below the crest of the trap and shall discharge to a stabilized area;

(f) The trap shall be cleaned when 50 percent of the original volume is filled; and

(g) The materials removed from the trap shall be properly disposed of and stabilized.

Env-Wq 1506.11 Sediment Control Methods: Construction Dewatering. Dewatering shall only be completed as follows:

(a) The discharge shall be stopped immediately if the receiving area shows any sign of instability or erosion;

(b) All channels, swales, and ditches dug for discharging water from the excavated area shall be stable prior to directing discharge to them;

(c) If a construction equipment bucket is used, it shall empty the material to a stable area;

(d) No dewatering shall occur during periods of intense, heavy rain;

(e) Flow to the sediment removal structure shall not exceed the structure's capacity to settle and filter flow or its volume capacity; and

(f) Wherever possible, the discharge from the sediment removal structure shall drain to a well-vegetated buffer by sheet flow while maximizing the distance to the nearest water resource and minimizing the slope of the buffer area.

Env-Wq 1506.12 Sediment Control Methods: Flocculants.

(a) Flocculants shall only be used as specified in this section.

(b) Flocculants shall not be applied directly to or within 100 feet of any surface water unless specifically approved by the department in writing in accordance with this section.

(c) The department shall not approve the use of flocculants unless the person requesting approval demonstrates that due to the presence of on-site clay colloidal particles, other erosion control measures, alone or in combination, will not be sufficient to prevent turbidity violations and sedimentation in downstream receiving waters.

(d) Sites shall be stabilized as soon as possible using conventional measures to minimize the need to use flocculants.

(e) A request for approval to use flocculants shall be submitted as soon as the need for such use is anticipated, whether with an application, while an application is pending, or after a permit has been issued.

(f) The applicant or permit holder, as applicable, shall submit the following for each type of flocculent proposed:

(1) Manufacturer's name;

(2) Product name;

(3) Material safety data sheets (MSDS) for the product;

(4) The results of chronic and acute toxicity testing of the product conducted in accordance with Env-Wq 1706.01 for wastewater;

(5) Proof from the manufacturer that the flocculants are anionic and are certified for compliance with ANSI/NSF Standard 60 drinking water treatment standards;

(6) Certification by the applicant or permit holder, as applicable, that all proposed flocculants are the same as those used in the toxicity tests and will not be altered in any way for the project;

(7) Certification by the applicant or permit holder, as applicable, that no additional chemicals are needed or will be used to enhance performance of the flocculent;

(8) An explanation as to why conventional erosion control measures, alone or in combination, will not be sufficient to prevent turbidity violations and sedimentation in downstream receiving waters;

(9) A flocculant application plan as specified in (g), below, prepared in consultation with the flocculant manufacturer or authorized manufacturer's representative; and

(10) A water quality sampling plan as specified in (i), below, for all discharges treated with flocculants and all surface waters receiving such discharges.

(g) The flocculant application plan required by (f)(9), above, shall include the following:

(1) A plan of the project showing where the flocculant will be applied and the name, location, and distance to all surface waters immediately downstream that might receive discharge from

areas treated with flocculants;

(2) The expected start and end dates for using flocculants, including a schedule and list of measures which will be taken to stabilize the site as soon as possible using conventional stabilization practices;

(3) Test results for representative soils from the site, and recommendations from the manufacturer based on the soil tests, indicating the type of flocculant and the recommended application rate;

(4) Frequency, method, and rates of application designed to ensure that flocculant concentrations will not exceed 50% of the IC25 or NOEC value, whichever is less, for the flocculant product used;

(5) Frequency of inspection and maintenance of the flocculant application system; and

(6) Method for the collection, removal, and disposal or stabilization of flocculated particles to prevent resuspension.

(h) Flocculant application systems shall be operated, inspected, and maintained only by qualified personnel with experience in their use.

(i) The water quality sampling plan required by (f)(10), above, shall include the following:

(1) At least 3 proposed water quality sample locations for each discharge and each receiving water, at least one of which shall be to establish background concentrations in the receiving water;

(2) The latitude and longitude of each sampling location;

(3) For each piece of equipment used for water quality testing, the make, model, and accuracy of the equipment, subject to the following:

a. Turbidimeters shall have an accuracy of 0.05 or +/-2%, whichever is greater, for readings below 100 NTUs and +/- 3% above 100 NTUs; and

b. pH meters shall have an accuracy of +/- 0.2 pH units;

(4) Standard procedures for calibration and quality assurance;

(5) A sampling plan that meets the specifications of (j), below;

(6) A copy of the field data sheet that will be used that accommodates the collection of all data specified in (k), below;

(7) Contact information for each individual who will be conducting water quality sampling, including name, mailing address, and daytime telephone number, and, if available, an e-mail address and fax number; and

(8) The qualifications of each individual who will be conducting water quality sampling.

(j) The sampling plan required by (i)(5) shall require the following:

(1) All water quality sampling shall be conducted by qualified personnel with experience in water quality testing and analysis;

(2) For all parameters, one duplicate sample shall be taken as a quality control measure for every 10 samples taken;

(3) Unless otherwise approved by the department based on site-specific conditions, sampling for pH and turbidity shall be conducted:

a. In at least one stormwater discharge location prior to the application of flocculants;

b. In all treated discharges that discharge to a surface water at a point downstream of the area where flocculant has been applied but upstream of the receiving surface water;

c. In each receiving surface water at a point upstream of the area of the application of flocculants and at a point approximately 100 feet downstream of the confluence of the treated discharge and the receiving water;

d. For all wet weather events that produce a discharge; and

e. Every hour for the first 2 hours once a discharge commences, every 2 hours for the next 6 hours and every 8 hours thereafter until the discharge has ceased; and

(4) Information shall be provided regarding how the concentration of flocculant will be measured in each discharge that discharges to a surface water of the state to ensure that toxicity concentrations are not exceeded. If a surrogate parameter such as turbidity is proposed to meet this requirement, data shall be provided showing the relationship between the surrogate parameter concentration and the concentration of flocculant in the surface water.

(k) Sampling results shall include the date, time, sample location, value of the results, applicable water quality criteria, a summary of any violation(s) and actions taken to correct the violation(s).

(l) Whenever flocculants are used and a discharge occurs, the permit holder shall submit a summary report to the department on a weekly basis that includes the following:

(1) The type and quantity of flocculant used;

(2) The date, duration of discharge, and estimated discharge rate;

(3) The total volume of water treated;

(4) The concentration of flocculant in the discharge, with supporting calculations; and

(5) A comparison of the amount of flocculant used to that which was originally proposed in the approved flocculant application plan and an explanation for any deviations from the plan.

Env-Wq 1506.13 Other Erosion and Sediment Control Methods. Other erosion and sediment control methods shall be approved by the department if the applicant can demonstrate that the proposed method will control erosion to at least the same extent as the other methods listed in Env-Wq 1506.01 through Env-Wq 1506.12.

PART Env-Wq 1507 REQUIREMENTS FOR PERMANENT METHODS FOR PROTECTING WATER QUALITY

Env-Wq 1507.01 Water Quality Degradation Prohibited. No person who has undertaken any terrain-alteration activity shall allow the activity to cause or contribute to any violations of the surface water quality standards established in Env-Wq 1700.

Env-Wq 1507.02 Criteria for Permanent Methods for Protecting Water Quality.

(a) Projects, including all stormwater management practices, shall be designed to:

(1) Remove pollutants in accordance with Env-Wq 1507.03;

(2) Recharge groundwater in accordance with Env-Wq 1507.04;

(3) Protect channels in accordance with Env-Wq 1507.05;

(4) Control peak runoff rates in accordance with Env-Wq 1507.06; and

(5) Implement long term maintenance practices in accordance with Env-Wq 1507.08.

(b) No stormwater management structures shall be constructed below the elevation of the 10 year floodplain for any project within the 100-year floodplain.

Env-Wq 1507.03 Stormwater Treatment Requirements.

(a) The stormwater treatment practices described in Env-Wq 1508 shall be acceptable methods for minimizing pollutant discharges to surface waters of the state, provided that all method-specific criteria are met.

(b) Stormwater treatment practices shall be accessible for proposed maintenance activities.

(c) Infiltration rates for designing stormwater treatment practices shall be determined in accordance Env-Wq 1504.13.

(d) Stormwater treatment practices shall meet the water supply well setback criteria identified in Env-Wq 1508.02.

(e) Stormwater treatment practices shall be designed for the water quality volume (WQV) or water quality flow (WQF), as applicable, calculated in accordance with Env-Wq 1504.09 and Env-Wq 1504.10, respectively.

Env-Wq 1507.04 Groundwater Recharge Requirements.

(a) The purpose of this section is to protect groundwater resources by reducing the amount of water diverted off-site by the proposed development.

(b) Subject to (e), below, the applicant shall capture and infiltrate the GRV calculated pursuant to Env-Wq 1504.11.

(c) Infiltration rates for designing groundwater recharge practices shall be determined in accordance with Env-Wq 1504.13.

(d) The groundwater recharge practices shall meet the water supply well setback criteria identified in Env-Wq 1508.02.

(e) Groundwater recharge shall be prohibited in the following areas:

(1) In an area of RSA 482-A jurisdiction, unless a wetlands permit which specifically allows the impacts has been issued pursuant to RSA 482-A;

(2) In groundwater protection areas where the stormwater comes from a high-load area;

(3) In areas that have contaminants in groundwater above the ambient groundwater quality standards established in Env-Or 603.03 or in soil above site-specific soil standards developed pursuant to Env-Or 600;

(4) In areas where the stormwater comes from areas that have contaminants in soil above site-specific soil standards developed pursuant to Env-Or 600;

(5) In areas where the stormwater comes from areas with underground storage tanks regulated under RSA 146-C or aboveground storage tanks regulated under RSA 146-A, where gasoline is dispensed or otherwise transferred to vehicles; and

(6) In areas with slopes greater than 15%, unless calculations are provided demonstrating that resulting seepage forces do not cause slope instability.

Env-Wq 1507.05 Channel Protection Requirements.

(a) The purpose of this section is to protect channels, downstream receiving waters, and wetlands from erosion and associated sedimentation resulting from urbanization within a watershed.

(b) Off-site flows shall meet one of the following criteria:

(1) If the 2 year, 24-hour post-development storm volume has not increased over the pre-development volume, then the 2-year, 24-hour post-development peak flow rate shall be equal to or less than the 2-year, 24-hour pre-development peak flow rate;

(2) The 2-year, 24-hour post-development peak flow rate shall be less than or equal to 50 percent of the 2-year, 24-hour pre-development peak flow rate; or

(3) The 2-year, 24-hour post-development peak flow rate shall be less than or equal to the 1-year, 24-hour pre-development peak flow rate.

Env-Wq 1507.06 Peak Runoff Control Requirements.

(a) The purpose of this section is to address increases in the frequency and magnitude of flooding caused by development.

(b) Subject to (d), below, the 10-year, 24-hour post-development peak flow rate shall not exceed the 10-year, 24-hour pre-development peak flow rate for all flows leaving the site.

(c) Subject to (d), below, the 50-year, 24-hour post-development peak flow rate shall not exceed the 50-year, 24-hour pre-development peak flow rate for all flows leaving the site.

(d) The following project areas shall be exempt from (b) and (c) above:

(1) Any area that directly discharges to a stream, waterbody, estuary, or tidal water; and

(2) Any area for which the applicant has provided supporting off-site drainage calculations for the 10-year and 50-year, 24-hour storm in accordance with Env-Wq 1504.08, showing that at a point immediately downstream from the project site the post-development peak flow rate from the site and the off-site contributing area does not exceed the pre-development peak flow rate at that point.

(e) The project shall provide supporting information in accordance with Env-Wq 1503.09, showing that there is no impact to properties as a result of developing within the 100-year floodplain.

Env-Wq 1507.07 Antidegradation Requirements. Reserved

Env-Wq 1507.08 Long-Term Maintenance.

(a) In order to ensure the long-term effectiveness of approved stormwater practices, the applicant shall establish a mechanism to provide for on-going inspections and maintenance (I&M) of the practices for so long as the practices are reasonably expected to be used.

(b) Subject to (f), below, the mechanism shall include an I&M manual for the practices which includes, at a minimum:

(1) The names of the responsible party or parties who will implement the required reporting, inspection, and maintenance activities identified in the I&M manual;

(2) The frequency of inspections;

(3) An inspection checklist to be used during each inspection;

(4) An I&M log to document each I&M activity;

(5) A deicing log to track the amount and type of deicing materials applied to the site;

(6) A plan showing the locations of all the stormwater practices described in the I&M manual; and

(7) Actions to be taken if any invasive species begin to grow in the stormwater management practices.

(c) All record keeping required by the I&M manual shall be maintained by the responsible party(ies) and be made available to the department upon request.

(d) Upon the completion of all terrain alteration activities that direct stormwater to a particular practice, the responsible party(ies) shall initiate the I&M activities.

(e) The responsible party(ies) may contract with one or more third parties to conduct the I&M activities, but shall remain responsible for ensuring the long-term effectiveness of the stormwater practices.

(f) If a federal or state agency or a political subdivision of the state agrees to assume the responsibility for some or all components of the stormwater management system, the following shall apply:

(1) The responsible party(ies) shall document the transfer of responsibility in writing to the department; and

(2) No I&M manual shall be required for those components for which the federal or state agency or political subdivision assumes responsibility, unless required by the agency or political subdivision as a condition of accepting responsibility.

(g) If ownership of the property is transferred, the new owner(s) shall become the responsible party(ies).

PART Env-Wq 1508 PERMANENT METHODS FOR PROTECTING WATER QUALITY

Env-Wq 1508.01 Definition. For purposes of this part, the following definition shall apply:

(a) "Water supply intake protection area" means, for a surface water used as a source by a public water system:

(1) The area within 250 feet of the normal high water mark of the surface water source within one-quarter mile radius of the public water system's intake, excluding areas outside the watershed of the surface water; and

(2) The area within 250 feet of the normal high water mark of any tributary that is within one-quarter mile radius of the public water system's intake, excluding areas outside the watershed of the surface water.

Env-Wq 1508.02 Setback Requirements from Water Supply Sources.

(a) No component of a stormwater management system shall discharge stormwater directly to groundwater or to the ground surface in an area where the stormwater will infiltrate the groundwater within a setback area for a water supply well as specified in Table 1508-1 below, except as specified in (c), below:

Table 1508-1: Water Supply Well Set-Backs

Well Type	Well Production Volume (gallons per day)	Setback From Well (feet)
Private Water Supply Well	Any Volume	75
Non-Community Public Water Supply Well	0 to 750	75
	751 to 1,440	100
	1,441 to 4,320	125
	4,321 to 14,400	150
Community Public Water Supply Well	0 to 14,400	150
Non-Community and Community Public Water Supply Well	14,401 to 28,800	175
	28,801 to 57,600	200
	57,601 to 86,400	250
	86,401 to 115,200	300
	115,201 to 144,000	350
	Greater than 144,000	400

(b) Within a water supply intake protection area, a stormwater management system shall not discharge to the surface water that defines the protection area, or to the ground surface, subsurface, or groundwater within 100 feet of that surface water, except as specified in (c), below.

(c) Stormwater management systems that discharge stormwater from areas less than 0.5 acre and that do not and will not receive stormwater from a high-load area shall be exempt from the private well and surface water setbacks of (a) and (b), above.

(d) A stormwater management system that discharges within a water supply intake protection area or to a storm sewer system that discharges within a water supply intake protection area shall incorporate water-tight designs that allow for shut-down or containment in the event of a spill if the system serves a bulk plant or terminal where bulk petroleum products or hazardous materials are transferred.

Env-Wq 1508.03 Stormwater Treatment Practices: Stormwater Ponds. Stormwater ponds, including but not limited to micropool extended detention ponds, wet ponds, wet extended detention ponds, multiple pond systems, and pocket ponds, shall be used only as follows:

(a) A sediment forebay shall be designed to contain 10% of the WQV and meet the criteria specified in Env-Wq 1508.10;

(b) Stormwater ponds shall have a permanent pool, or combination of permanent pool and extended detention, greater than or equal to the WQV;

(c) The perimeter of each pond shall be curvilinear;

(d) The side slopes of the pond shall be no steeper than 3:1 and no flatter than 20:1;

(e) The minimum length to width ratio shall be 3:1, where:

(1) Length is measured along the flow path between the inlet and outlet at mid-depth; and

(2) Width is computed by summing the average top width and the average bottom width and dividing by 2;

(f) A hydrologic budget, accounting for the inflow to, outflow from, and storage in the stormwater pond, shall be prepared demonstrating that sufficient water is available to maintain the water depth in the permanent pool;

(g) If extended detention is provided, the extended detention volume shall have a minimum 24-hour drawdown;

(h) If extended detention is provided, the outlet shall discharge at a maximum flow rate of twice the average flow rate, where the average flow rate is calculated as the extended detention volume divided by 24 hours;

(i) The average pool depth shall be 3 to 6 feet;

(j) The permanent pool depth shall not be greater than 8 feet;

(k) A planting plan which shows no invasive species and which replicates the spatial and compositional diversity of a natural wetland shall be developed by an individual having knowledge of wetlands ecosystems and, in particular, wetlands plant species;

(l) The inlet and outlet shall be located as far apart as possible;

(m) If elevations allow, a manually-controlled drain shall be provided to dewater the pond over a 24-hour period;

(n) Outlet structures with 6-inch or smaller diameter orifices or 6-inch wide or narrower weirs shall have trash rack(s) to minimize clogging;

(o) Energy dissipation shall be provided at the inlet and outlet to prevent scour;

(p) The stormwater pond shall be able to discharge the 50-year, 24-hour storm without overtopping the embankment crest; and

(q) The pond shall not be located in an area of RSA 482-A jurisdiction, unless a wetlands permit which specifically allows the impacts has been issued pursuant to RSA 482-A.

Env-Wq 1508.04 Stormwater Treatment Practices: Stormwater Wetlands. Stormwater wetlands, including but not limited to shallow wetlands, extended detention wetlands, pond/wetland systems, and gravel wetlands, shall be used only as follows:

(a) A sediment forebay shall be designed to contain 10% of the WQV and shall meet the criteria specified in Env-Wq 1508.10;

(b) Stormwater wetlands shall have a permanent pool, or combination of permanent pool and extended detention, greater than or equal to the WQV;

(c) If extended detention is used in a stormwater wetland, the extended detention volume shall not comprise more than 50% of the WQV;

(d) If extended detention is provided, the extended detention volume shall have a minimum 24 hour drawdown;

(e) If a gravel wetland is used, it shall have a sediment forebay and 2 treatment bays, each of which is designed to filter at least 45% of the WQV;

(f) The perimeter of each wetland shall be curvilinear;

(g) The side slopes of each wetland shall be no greater than 3:1 and no flatter than 20:1;

(h) The minimum length to width ratio shall be 3:1, where:

(1) Length is measured along the flow path between the inlet and outlet at mid-depth;

(2) Width is computed by summing the average top width and the average bottom width and dividing by 2;

(i) A hydrologic budget, accounting for the inflow to, outflow from, and storage in the stormwater pond, shall be prepared that demonstrates that sufficient water is available to maintain the wetland and that the wetland will not be inundated with an excess of water;

(j) The maximum water surface elevation shall not extend more than 4 feet above the permanent pool during the 50-year, 24-hour storm;

(k) The permanent pool depth shall not be greater than 8 feet;

(l) A planting plan which shows no invasive species and which replicates the spatial and compositional diversity of a natural wetland shall be developed by an individual having knowledge of wetlands ecosystems and, in particular, wetlands plant species;

(m) The inlet and outlet shall be located as far apart as possible;

(n) If elevations allow, a manually-controlled drain shall be provided to dewater the pond over a 24-hour period;

(o) Outlet structures with 6-inch or smaller diameter orifices or 6-inch wide or narrower weirs shall have trash rack(s) to minimize clogging;

(p) Energy dissipation shall be provided at the inlet and outlet to prevent scour;

(q) The stormwater wetland shall be able to discharge the 50-year, 24-hour storm without overtopping the embankment crest; and

(r) The stormwater wetland shall not be located in an area of RSA 482-A jurisdiction, unless a wetlands permit which specifically allows the impacts has been issued pursuant to RSA 482-A.

Env-Wq 1508.05 Stormwater Treatment Practices: Infiltration Practices. Infiltration practices, including but not limited to infiltration trenches, infiltration basins, dry wells, and drip edges shall be used only as follows:

(a) Infiltration practices shall be prohibited in the following areas:

(1) In an area of RSA 482-A jurisdiction, unless a wetlands permit which specifically allows the impacts has been issued pursuant to RSA 482-A;

(2) In groundwater protection areas where the stormwater comes from a high-load area;

(3) In areas that have contaminants in groundwater above the ambient groundwater quality standards established in Env-Or 603.03 or in soil above site-specific soil standards developed pursuant to Env-Or 600;

(4) In areas where the stormwater comes from areas that have contaminants in soil above site-specific soil standards developed pursuant to Env-Or 600;

(5) In areas where the stormwater comes from areas with underground storage tanks regulated under RSA 146-C or aboveground storage tanks regulated under RSA 146-A, where gasoline is dispensed or otherwise transferred to vehicles;

(6) Into soils where the infiltration rate, prior to adding a factor of safety, is less than 0.5 inches per hour, as calculated per Env-Wq 1504.13;

(7) Subject to (b), below, into soils where the infiltration rate, prior to adding a factor of safety, is more than 10 inches per hour, unless the stormwater directed to the infiltration practice has been treated in accordance with Env-Wq 1507.03 prior to entering the practice; and

(8) In areas with slopes greater than 15%, unless calculations are provided demonstrating that

resulting seepage forces do not cause slope instability;

(b) Soils may be amended to reduce the infiltration rate to less than or equal to 10 inches per hour, prior to adding a factor of safety, as confirmed by results from field measurement method described in Env-Wq 1504.13(e);

(c) Pretreatment as described in Env-Wq 1508.10 through Env-Wq 1508.14 shall be provided if stormwater other than roof run-off will be discharged to the practice;

(d) If a sediment forebay is used to meet the criteria in (c), above, it shall be designed to contain 25% of the WQV and meet the criteria specified in Env-Wq 1508.10;

(e) The volume of the practice, excluding any sediment forebay areas, shall be large enough to contain the WQV without depending on infiltration;

(f) The practice shall completely drain the water quality volume within 72 hours;

(g) The design infiltration rate shall be determined in accordance with Env-Wq 1504.13;

(h) Subject to (i) and (j) below, the SHWT and bedrock shall be at least 3 feet below the bottom of the practice;

(i) If the practice is located within a groundwater protection area or a water supply intake protection area, the SHWT and bedrock shall be at least 4 feet below the bottom of the practice;

(j) If the stormwater directed to the infiltration practice has been treated in accordance with Env-Wq 1507.03 prior to entering the practice, the SHWT and bedrock shall be at least one foot below the bottom of the practice;

(k) If the practice includes an infiltration trench, the following requirements also shall be met:

(1) The trench shall be 4 to 10 feet deep;

(2) The infiltration media shall be clean, washed, well-graded aggregate with a diameter of 1.5 to 3 inches such that the porosity is 40%;

(3) An observation well along the trench center line shall be provided; and

(4) The overflow structure shall be designed to discharge the 10-year, 24-hour storm;

(l) If the practice includes an in-ground infiltration basin, the following requirements also shall be met:

(1) The perimeter of the pond shall be curvilinear;

(2) Side slopes shall be no steeper than 3:1 and no flatter than 20:1;

(3) The basin floor shall be flat, or zero percent slope;

(4) The basin floor shall be prepared with one of the following:

a. A 6-inch layer of coarse sand or 3/8 inch pea gravel;

b. Grass turf that can survive inundation for up to 72 hours and still provide a dense, vigorous turf layer; or

c. A layer of coarse organic material, such as erosion control mix or composted mulch, that is tilled into the soil, soaked, and allowed to dry; and

(5) The total volume of the basin(s) shall be large enough to infiltrate or infiltrate and discharge the 50-year, 24-hour storm without overtopping;

(m) If the practice includes an underground infiltration basin, the following requirements also shall be met:

(1) An observation well or accessible manhole structure shall be provided; and

(2) The outfalls shall be designed to discharge the 10-year, 24-hour storm;

(n) If the practice includes one or more dry wells, each dry well shall be equipped with an overflow structure designed to discharge the 10-year, 24-hour storm; and

(o) If the practice includes one or more stone drip edges, the following requirements also shall be met:

(1) Runoff shall be from roofs only; and

(2) Each drip edge shall be equipped with an overflow structure designed to discharge the 10-year, 24-hour storm.

Env-Wq 1508.06 Stormwater Treatment Practices: Filtering Practices. Filtering practices, including but not limited to surface sand filters, underground sand filters, tree box filters, bioretention systems, pervious asphalt, and pervious concrete shall be used only as follows:

(a) Filtering practices shall not be located in an area of RSA 482-A jurisdiction, unless a wetlands permit which specifically allows the impacts has been issued pursuant to RSA 482-A;

(b) Filtering practices shall be prohibited in the following areas, unless the practice has an impermeable liner:

(1) In groundwater protection areas where the stormwater comes from a high-load area;

(2) In areas that have contaminants in groundwater above the ambient groundwater quality standards established in Env-Or 603.03 or in soil above site-specific soil standards developed pursuant to Env-Or 600;

(3) In areas where the stormwater comes from areas that have contaminants in soil above site-specific soil standards developed pursuant to Env-Or 600;

(4) In areas where the stormwater comes from areas with underground storage tanks regulated under RSA 146-C or aboveground storage tanks regulated under RSA 146-A, where gasoline is dispensed or otherwise transferred to vehicles; and

(5) In areas with slopes greater than 15%, unless calculations are provided demonstrating that resulting seepage forces do not cause slope instability;

(c) Pretreatment as described in Env-Wq 1508.10 through 1508.14 shall be provided if stormwater other than roof runoff only will be discharged to the practice;

(d) If a sediment forebay is used to meet the criteria in (c) above, it shall be designed to contain 25% of the WQV and meet the criteria specified in Env-Wq 1508.10;

(e) The practice shall completely drain the water quality volume within 72 hours or less;

(f) If the practice has an impermeable liner, (g) through (j), below, shall not apply;

(g) The design infiltration rate of the underlying native soil or fill soil shall be determined in accordance with Env-Wq 1504.13;

(h) If the infiltration rate, prior to adding a factor of safety, of the underlying soil or proposed fill, as determined pursuant to (g), above, is less than 0.50 inches per hour, an underdrain system shall be provided as follows:

(1) The underdrain shall consist of a 6-inch diameter perforated pipe set in ¾-inch to 2-inch diameter stone or gravel washed free of fines and organic material;

(2) The stone or gravel layer shall extend at least 4 inches above the drainage pipes and 4 inches below the drainage pipes; and

(3) The stone or gravel layer shall be separated from the filter media with a 3-inch layer of 3/8-inch pea gravel;

(i) If the practice is not in a groundwater protection area or water supply intake protection area, the SHWT and bedrock shall be at least one foot below the bottom of the filter course material;

(j) If the practice is located within a groundwater protection area or water supply intake protection area, the practice shall:

(1) Have at least one foot of separation between the bottom of the practice and the SHWT or bedrock; or

(2) Have a filter course depth twice the depth required in this section and meet (i) above;

(k) An overflow structure shall be provided to discharge the 10-year, 24-hour storm;

(l) If the practice includes a surface sand filter, the following requirements also shall be met:

(1) The filter, including the storage area above the filter, the filter media voids, and the pretreatment area, shall store at least 75% of the WQV;

(2) The contributing drainage area shall be less than 10 acres;

(3) The filter media shall be a minimum 18 inches deep;

(4) The filter media shall consist of one of the following mixtures volume:

a. 50% to 55% by volume sand also identified as ASTM C-33 concrete sand, 20% to 30% by volume of loamy sand topsoil with 15% to 25% fines passing the number 200 sieve, and 20% to 30% by volume moderately fine shredded bark or wood fiber mulch with

less than 5% passing the number 200 sieve;

b. 20% to 30% by volume of moderately fine shredded bark or wood fiber mulch that has no more than 5% fines passing the number 200 sieve, with 70 to 80% by volume loamy coarse sand used in the mixture meeting the following sieve analysis specification:

1. From 85 to 100 percent by weight shall pass the number 10 sieve;

2. From 70 to 100 percent by weight shall pass the number 20 sieve;

3. From 15 to 40 percent by weight shall pass the number 60 sieve; and

4. From 8 to 15 percent by weight shall pass the number 200 sieve;

(5) The filter shall have an access grate; and

(6) The filter shall not be covered with grass;

(m) If the practice includes an underground sand filter, the following requirements also shall be met:

(1) The filter, including the filter media voids and the pretreatment chamber, shall store at least 75% of the WQV;

(2) The contributing drainage area shall be less than 10 acres;

(3) The filter media shall be a minimum 24 inches deep;

(4) The filter media shall consist of one of the mixtures specified in (l)(4) above; and

(5) The filter shall have an access grate;

(n) If the practice includes a bioretention system, the following requirements also shall be met:

(1) The ponding area, including the storage area above the filter and the filter media voids, shall store 100% or more of the WQV;

(2) The contributing drainage area shall be less than 5 acres;

(3) The filter media shall be a minimum 18 inches deep;

(4) The filter media shall consist of one of the mixtures specified in (l)(4), above;

(5) Side slopes shall not exceed 2:1;

(6) The surface shall be covered with 2- to 3-inches of shredded bark mulch that is well aged, uniform in color, and free of foreign material including plant material; and

(7) The surface area shall have the following planting design plan:

a. Only native, non-invasive species shall be used;

b. Plant layout shall be random and natural;

c. Woody vegetation shall not be used near inflow locations;

d. Vegetation directly over the filter media shall be limited to facultative wetland species as specified in National List of Plant Species that Occur in Wetlands: Northeast (Region 1), May 1988, published by U.S. Fish and Wildlife Services, or other species that can withstand periodic inundation, as determined by a certified wetland scientist;

e. Trees or large shrubs shall be planted along the perimeter; and

f. The plan shall establish a perimeter tree canopy with an understory of shrubs and herbaceous plants;

(o) If the practice includes pervious asphalt, the following requirements also shall be met:

(1) The practice shall be designed and installed in accordance with UNHSC Design Specifications for Porous Asphalt Pavement and Infiltration Beds, July 2007, last revised April 2008, published by University of New Hampshire Stormwater Center; and

(2) The thickness of the filter course shall be:

a. At least 12 inches for any asphalt surface which receives only direct rainfall to its surface; or

b. For any asphalt surface receiving rainfall runoff from contributing areas other than direct rainfall onto its surface, at least 12 inches multiplied by the ratio of the total contributing area to the area of the asphalt surface; and

(p) If the practice includes pervious concrete, the following requirements also shall be met:

(1) The filter course material shall consist of NHDOT Standard Specification for Road and Bridge Construction, 2006, sand specification item number 304.1;

(2) The practice shall be designed and installed in accordance with American Concrete Institute, Manual of Concrete Practice 522. 1-08, 2008, Pervious Concrete;

(3) The practice shall be installed by a contractor certified in pervious concrete installation by the National Ready Mix Concrete Association (NRMCA); and

(4) The thickness of the filter course shall be:

a. At least 12 inches for any concrete surface which receives only direct rainfall to its surface; or

b. For any concrete surface receiving rainfall runoff from contributing areas other than direct rainfall onto its surface, at least 12 inches multiplied by the ratio of the total contributing area to the area of the concrete surface.

Env-Wq 1508.07 Stormwater Treatment Practices: Treatment Swales. Treatment swales shall be used only as follows:

(a) Swales shall not be located in an area of RSA 482-A jurisdiction, unless a wetlands permit which specifically allows the impacts has been issued pursuant to RSA 482-A;

(b) Swales shall not be used in groundwater protection areas where the stormwater comes from a high-load area, unless the practice has an impermeable liner;

(c) The swale length shall be at least 100 feet long;

(d) Any portion of the swale that is in a roadside ditch which collects runoff from the adjacent roadway surface shall not count towards the minimum length specified in (c), above;

(e) The bottom of the swale shall be no more than 8 feet wide, provided that widths up to 16 feet shall be allowed if a dividing berm or structure is used such that neither channel is more than 8 feet wide;

(f) The bottom of the swale shall not be within the SHWT;

(g) The swale side slopes shall be no steeper than 3:1 and no flatter than 20:1;

(h) The swale shall have a longitudinal slope between 0.5% and 2% without check dams or 2% to 5% with check dams;

(i) The maximum flow depth in the swale shall be 4 inches at the WQF;

(j) The swales hydraulic residence time shall be greater than 10 minutes during the WQF;

(k) The swale shall be sized to discharge the 10-year, 24-hour storm; and

(l) The swale shall have at least 85% vegetated growth prior to directing runoff to it.

Env-Wq 1508.08 Stormwater Treatment Practices: Vegetated Buffers. Vegetated buffers, including but not limited to residential or small pervious area buffers, developed area buffers, roadway buffers , and ditch turn-out buffers, shall be used only as follows:

(a) Buffers shall not be located in an area of RSA 482-A jurisdiction;

(b) The buffer shall be directly adjacent to the area being treated;

(c) The runoff shall enter the buffer as sheet flow;

(d) The buffer shall not be interrupted by any intermittent or perennial stream channel or other drainage way;

(e) Only the continuous flow path length shall be counted toward the buffer length;

(f) The vegetative cover type shall be forest or meadow or a combination of forest and meadow, and if the latter, the required sizing of the buffer shall be determined as a weighted average based on the percent of buffer in forest and the percent of buffer in meadow;

(g) The hydrologic soil group shall be identified, and if the buffer contains more than one soil group, the required sizing of the buffer shall be determined as a weighted average based on the percent of the buffer in each soil type;

(h) The buffer area shall be identified on the plans and protected by deed restrictions or covenants or both, so that it remains in an unaltered state;

(i) If the practice is for a residential or small pervious area, the following requirements also shall be

met:

(1) Runoff shall be received from any of the following:

a. A single family or duplex residential lot;

b. A developed area with less than 10% imperviousness where the flow path over the developed area does not exceed 150 feet; or

c. An impervious area not greater than one acre where the flow path across the impervious area does not exceed 100 feet;

(2) Runoff shall enter the buffer as sheet flow without the aid of a level spreader;

(3) The buffer slope shall be uniform and not exceed 15%; and

(4) Buffer sizing shall be as shown in Table 1508-2 for buffer slopes of 0% to 8% and in Table 1508-3 for buffer slopes of greater than 8% to 15%, below:

Table 1508-2: Required Buffer Flow Path Length per Soil and Vegetative Cover Types with 0% to 8% Buffer Slope

Hydrologic Soil Group of Soil in Buffer	Length of Flow Path for Forested Buffer (feet)	Length of Flow Path for Meadow Buffer (feet)
A	45	75
B	60	85
C	75	100
D	150	Not Applicable

Table 1508-3: Required Buffer Flow Path Length per Soil and Vegetative Cover Types with Greater Than 8% to 15% Buffer Slope

Hydrologic Soil Group of Soil in Buffer	Length of Flow Path for Forested Buffer (feet)	Length of Flow Path for Meadow Buffer (feet)
A	55	90
B	70	100
C	90	120
D	180	Not Applicable

(j) If the practice is for a developed area using a buffer with a stone berm level spreader, the following requirements also shall be met:

(1) Runoff shall be received from a developed area where the runoff is concentrated;

(2) A stone berm level spreader that meets the requirements of Env-Wq 1508.17 and is no less than 20 feet in length shall be provided to distribute the flow to the buffer;

(3) The buffer slope shall be uniform and not exceed 15%; and

(4) Subject to (5) below, buffer sizing shall be as shown in Table 1508-4 for buffer slopes of

0% to 8% and in Table 1508-5 for buffer slopes of greater than 8% to 15%, below:

Table 1508-4: Required Level Spreader Berm Length Per Acre of Impervious Area and Lawn Area Draining to the Buffer for a Given Buffer Length with 0% to 8% Buffer Slope

Hydrologic Soil Group of Soil in Buffer	Available Buffer Length (feet)	Level Spreader Berm Length to a Forested Buffer (feet)		Level Spreader Berm Length to a Meadow Buffer (feet)	
		Impervious Area	Lawn Area	Impervious Area	Lawn Area
A	75	75	25	125	35
	100	65	20	75	25
	150	50	15	60	20
B	75	100	30	150	45
	100	80	25	100	30
	150	65	20	75	25
C	75	125	35	150	45
	100	100	30	125	35
	150	75	25	100	30
D	150	150	45	200	60

Table 1508-5: Required Level Spreader Berm Length Per Acre of Impervious Area and Lawn Area Draining to the Buffer for a Given Buffer Length with Greater than 8% to 15% Buffer Slope

Hydrologic Soil Group of Soil in Buffer	Available Buffer Length (feet)	Level Spreader Berm Length to a Forested Buffer (feet)		Level Spreader Berm Length to a Meadow Buffer (feet)	
		Impervious Area	Lawn Area	Impervious Area	Lawn Area
A	75	90	30	150	40
	100	80	25	90	30
	150	60	20	70	25
B	75	120	35	180	55
	100	95	30	120	35
	150	80	25	90	30
C	75	150	40	180	55
	100	120	35	150	40
	150	90	30	120	35
D	150	180	55	240	70

(5) If a detention structure is used upstream of the level spreader, tables 1508-4 and 1508-5 shall be used with the assumption that 1.0 acre of impervious area is equivalent to a peak flow of 1.0 cfs during the 2-year, 24-hour storm.

(k) If the practice is a roadway buffer, the following requirements also shall be met:

(1) Runoff shall be received from the road surface and shoulder and sheet directly into the

buffer;

(2) No areas other than the adjacent road surface and shoulder shall be directed to the buffer;

(3) The road shall be parallel to the contour of the buffer slope;

(4) Except as provided in (5) below, the man-made buffer slope shall be uniform and not exceed 15%;

(5) A maximum of 20 feet of vegetated roadway embankment slope of 3:1 or flatter shall count toward the required buffer length as required in (8) below;

(6) The natural buffer slope shall be uniform and not exceed 20%;

(7) The buffer shall be vegetated; and

(8) The buffer flow path shall be at least 50 feet for one travel lane draining to the buffer and at least 30 additional feet for each additional travel lane draining to the buffer.

(l) If the practice is a ditch turn-out buffer, the following requirements also shall be met:

(1) No areas other than road surface, road shoulder, and road ditch shall be directed to the buffer;

(2) No more than 6,000 square feet of pavement shall be directed to the buffer;

(3) A stone berm level spreader that meets the requirements of Env-Wq 1508.17 and is no less than 20 feet in length shall be provided at the end of the ditch to distribute runoff to the buffer;

(4) The buffer slope shall be uniform and not exceed 15%; and

(5) The buffer sizing shall be as shown in Table 1508-6 for buffer slopes of 0% to 8% and in Table 1508-7 for buffer slopes of greater than 8% to 15%, below:

Table 1508-6: Required Buffer Flow Path Length per Area Directed to the Buffer with 0% to 8% Buffer Slope

Hydrologic Soil Group of Soil in Buffer	Maximum Area Directed to the Buffer (square feet)	Length of Flow Path for Forested Buffer (feet)	Length of Flow Path for Meadow Buffer (feet)
A or B	3,000	50	70
	4,500	50	85
	6,000	60	100
C	3,000	60	100
	4,500	75	120
	6,000	100	Not Applicable
D	3,000	100	150

Table 1508-7: Required Buffer Flow Path Length per Area Directed to the Buffer with Greater than 8% to 15% Buffer Slope

Hydrologic Soil Group of Soil in Buffer	Maximum Area Directed to the Buffer (square feet)	Length of Flow Path for a Forested Buffer (feet)	Length of Flow Path for Meadow Buffer (feet)
A or B	3,000	60	85
	4,500	60	100
	6,000	70	120
C	3,000	70	120
	4,500	90	145
	6,000	120	Not Applicable
D	3,000	120	180

Env-Wq 1508.09 Other Stormwater Treatment Practices.

(a) An applicant who wishes to use a stormwater treatment practice not specified in these rules shall submit a written request to the department for approval of the practice.

(b) The request shall include the following:

(1) The location where the practice is proposed to be used;

(2) A description of the protocol used for the field-based assessment of the practice; and

(3) A detailed description of the practice, including how the practice meets the requirements specified in (f), below.

(c) The department shall approve the proposed stormwater treatment practice if the information provided by the applicant demonstrates that:

(1) The field-based assessment was performed in accordance with a protocol which produces the same quality and quantity of data as the protocols established by the University of New Hampshire Stormwater Center, the Technology Acceptance and Reciprocity Partnership, or the Washington State Department of Ecology Technology Assessment Protocol; and

(2) The proposed practice meets the criteria specified in (f), below.

(d) If conditions are necessary to ensure that the practice meets the criteria specified in (f), below, the approval shall specify all such conditions.

(e) The department shall notify the applicant of its decision in writing. If the request is denied, the notice shall specify the reason(s) for the denial.

(f) A proposed stormwater treatment practice shall be approved only if the practice:

(1) Captures and treats the WQV or WQF;

(2) Achieves a minimum removal rate of 80% of total suspended solids at the WQF;

(3) Does not discharge floatable debris, including oil and petroleum products, for all flow rates up to the design WQF, either alone or in combination with pretreatment;

(4) Shows operation longevity of at least 5 years in the field; and

(5) Has automatic operation during runoff events.

Env-Wq 1508.10 Pretreatment Practices: Sediment Forebays. Sediment forebays shall be used only as follows:

(a) Unless specified otherwise, a sediment forebay shall be designed to contain 10% of the WQV;

(b) Forebays shall be no less than 2 feet and no more than 6 feet in depth;

(c) Forebay side slopes shall be no steeper than 3:1;

(d) A fixed vertical sediment marker shall be installed to measure sediment depth; and

(e) Upon completion of maintenance, all disturbed areas shall be re-stabilized in accordance with the approved plans.

Env-Wq 1508.11 Pretreatment Practices: Vegetated Filter Strips. Vegetated filter strips shall be used only as follows:

(a) The vegetative cover type of the filter strip shall be forest or meadow or a combination of forest and meadow;

(b) The overland flow length to the filter strip shall not exceed 75 feet for impervious surfaces and 150 feet for pervious surfaces;

(c) Longitudinal slopes shall be no less than 0.5 percent and no greater than 15 percent; and

(d) The vegetated filter strip shall be at least 25 feet long and as wide as the area draining to the strip.

Env-Wq 1508.12 Pretreatment Practices: Pretreatment Swales. Pretreatment swales shall be used only as follows:

(a) Swales shall not be located in an area of RSA 482-A jurisdiction, unless a wetlands permit which specifically allows the impacts has been issued pursuant to RSA 482-A;

(b) Swales shall not be used in groundwater protection areas where the stormwater comes from a high-load area, unless the practice has an impermeable liner;

(c) The swale length shall be at least 50 feet long;

(d) Any portion of the swale that is in a roadside ditch which collects runoff from the adjacent roadway shall not count towards the minimum length specified in (c), above;

(e) The bottom of the swale shall be no more than 8 feet wide;

(f) The bottom of the swale shall not be within the SHWT;

(g) The swale side slopes shall be no steeper than 3:1 and no flatter than 20:1;

(h) The swale shall have a longitudinal slope between 0.5% and 2% without check dams or 2% to 5% with check dams;

(i) The maximum flow depth in the swale shall be 4 inches at the WQF;

(j) The swale shall be sized to discharge the 10-year, 24-hour storm; and

(k) The swale shall be vegetated.

Env-Wq 1508.13 Pretreatment Practices: Flow-Through Devices. Flow through devices such as hydrodynamic separators, water quality inlets, and oil/particle separators shall be used only as follows:

(a) The devices shall be designed according to the manufacturer's recommendations based on the WQF to achieve (b), below;

(b) The devices shall remove a minimum of 80% of U.S. Silica grade OK-110 sand at the WQF;

(c) Water quality inlets and oil/particle separators shall have a 4 foot minimum sump;

(d) Water quality inlets shall be a 3-chamber design with the first and second chambers having a minimum of 400 cubic feet of storage per acre of contributing impervious area;

(e) Each water quality inlet and oil/particle separator chamber shall be accessible by means of a separate manhole;

(f) The contributing area to the oil/particle separator shall not exceed 1.0 acre of impervious area;

(g) Oil/particle separators shall only be used in an off-line configuration to treat the WQF; and

(h) Oil/particle separators shall have a minimum of 400 cubic feet of permanent pool storage per acre of contributing impervious area.

Env-Wq 1508.14 Pretreatment Practices: Deep Sump Catch Basins. Deep sump catch basins shall be used only as follows:

(a) The contributing area shall not exceed 0.25 acres of impervious area;

(b) The distance from the bottom of the outlet pipe to the bottom of the catch basin shall be at least 4 feet;

(c) The diameter of the catch basin shall be at least 4 feet; and

(d) A hooded outlet pipe shall be provided that extends at least one foot below the bottom of the outlet pipe.

Env-Wq 1508.15 Groundwater Recharge Practices. The following methods shall be acceptable methods for infiltrating groundwater, provided that all method-specific criteria are met:

(a) Infiltration practices accordance with Env-Wq 1508.05;

(b) Filtering practices in accordance with Env-Wq 1508.06, which infiltrate into the native soil below the practice;

(c) Permeable surfaces, including but not limited to, modular concrete paving blocks, modular concrete or plastic lattice, cast-in-place concrete grids, soil enhancement technologies, and other materials such as gravel, cobbles, wood, mulch, brick, or natural stone, provided that the following criteria are met:

(1) The practice shall completely drain within 72 hours;

(2) Bedrock and the SHWT shall be at least one foot below the base of the practice; and

(3) The practice has a design infiltration rate of 0.5 inches per hour or more, as calculated per Env-Wq 1504.13.

(d) Other groundwater recharge practices that meet the following:

(1) The practice completely drains within 72 hours;

(2) Bedrock and the SHWT shall be at least one foot below the base of the practice; and

(3) The practice has a field measured infiltration rate of 0.5 inches per hour or more, as calculated per Env-Wq 1504.13.

Env-Wq 1508.16 Stormwater Control and Conveyance Practices: Detention Basins. Underground and in-ground detention basins shall be used only as follows:

(a) Stormwater from high-load areas shall not be directed to unlined detention basins;

(b) Basins shall not be located in an area of RSA 482-A jurisdiction, unless a wetlands permit which specifically allows the impacts has been issued pursuant to RSA 482-A;

(c) Underground detention basins shall have access manholes located upstream, downstream, and at intermediate locations to provide access for maintenance; and

(d) If the practice includes one or more in-ground detention basins, the following requirements also shall be met:

(1) The side slopes shall be 2:1 or flatter;

(2) The crest shall be at least 4 feet wide;

(3) Outlet structures with 6-inch or smaller diameter orifices or 6-inch wide or narrower weirs shall have trash rack(s) to minimize clogging;

(4) Energy dissipation shall be provided at the inlet and outlet to prevent scour;

(5) The detention basin shall be able to discharge the 50-year, 24-hour storm without overtopping the embankment crest;

(6) All areas of the detention basin, including the basin floors, side slopes, berms, impoundment structures, or other earth structures shall have vegetation suitable for the soil type, the moisture content, the amount of sun exposure, and the level of inundation to which it is exposed; and

(7) In accordance with RSA 482, a dam permit may be needed prior to construction. Any conditions imposed under such permit that are more stringent than those listed above shall apply.

Env-Wq 1508.17 Stormwater Control and Conveyance Practices: Stone Berm Level Spreaders. Stone berm level spreaders shall be used only as follows:

(a) The level spreader shall discharge to a vegetated receiving area with the capacity to convey the discharge without erosion;

(b) The receiving area shall be stable prior to construction of the level spreader;

(c) The receiving area shall have a slope of less than 15 percent;

(d) The level spreader shall be a 6-inch deep trapezoidal trough;

(e) The level spreader shall have a minimum bottom width of 3 feet.

(f) The level spreader base and top of berm shall be at 0% grade;

(g) The level spreader side slopes and berm side slopes shall be 2:1 or flatter;

(h) The berm shall be at least 18 inches high;

(i) The berm shall have a top width of at least 2 feet; and

(j) The stone used in the berm shall be graded within the following limits:

(1) 100 percent by weight shall pass the 12-inch sieve;

(2) From 84 to 100 percent by weight shall pass the 6-inch sieve;

(3) From 68 to 83 percent by weight shall pass the 3-inch sieve;

(4) From 42 to 55 percent by weight shall pass the 1-inch sieve; and

(5) From 8 to 12 percent by weight shall pass the number 4 sieve;

Env-Wq 1508.18 Stormwater Control and Conveyance Practices: Conveyance Swales. Conveyance swales shall be used only as follows:

(a) Stormwater from high-load areas shall not be directed to unlined swales;

(b) The side slopes shall be designed to convey non-erosive velocities; and

(c) The swale shall convey the 10-year, 24-hour storm.

Env-Wq 1508.19 Stormwater Control and Conveyance Practices: Earthen Terraced Slope or Benching.

(a) If diversion swales are incorporated to keep upstream drainage off the constructed slope, a bench shall be provided wherever the vertical height exceeds 40 feet.

(b) If diversion swales are not incorporated to keep upstream drainage off the constructed slope, benches shall be provided wherever the vertical height of any 2:1 slope exceeds 20 feet, any 3:1 slope exceeds 30 feet, or any 4:1 slope exceeds 40 feet.

(c) Benches shall be located to divide the slope face into equal parts;

(d) Benches shall convey the stormwater to a stable outlet;

(e) Benches shall be a minimum of 6 feet wide;

(f) Benches shall be designed with a reverse slope of 6:1 or flatter from the top of the lower slope to the toe of the upper slope and with a minimum of one foot in depth;

(g) The bench gradient to the outlet shall be between 2 and 3 percent; and

(h) The flow length within a bench shall not exceed 800 feet.

PART Env-Wq 1509 WAIVERS AND DEADLINE EXTENSIONS

Env-Wq 1509.01 Purpose. The purpose of this part is to establish the procedures and criteria for requesting and obtaining:

(a) Waivers, to accommodate those situations where strict adherence to the rules in Env-Wq 1500 would not be in the best interest of the public or the environment; and

(b) Extensions of deadlines specified in a notice of incompleteness or request for additional information.

Env-Wq 1509.02 Waiver Requests.

(a) An applicant for a permit or a permit holder who is or would be directly and adversely affected by the strict application of a rule in Env-Wq 1500 may request a waiver thereof.

(b) Each request for a waiver shall be filed in writing and contain the information specified in Env-Wq 1509.03.

(c) Any request for a waiver that relates to an application for an AOT permit shall be submitted with the application or as soon thereafter as the need for the waiver is identified by the applicant or the department.

Env-Wq 1509.03 Content and Format of Waiver Requests.

(a) The person requesting the waiver shall provide the following information to the department:

(1) The name, mailing address, and daytime telephone number of the requestor and, if available, a fax number and e-mail address of the requestor;

(2) The name, mailing address, and daytime telephone number of the property owner, if other than the requestor and, if available, a fax number and e-mail address of the property owner;

(3) The location of the property to which the waiver request relates, if other than the mailing address of the requestor or owner, or a statement that the mailing address is the location of the property;

(4) The specific rule section or paragraph for which a waiver is being requested;

(5) A full explanation of why a waiver is being requested, including an explanation of the consequences of complying with the rule as written;

(6) Whether the need for the waiver is temporary, and if so, the estimated length of time that the waiver will be needed;

(7) If applicable, a full explanation of the alternative that is proposed to be substituted for the requirement in the rule, including written documentation or data, or both, to support the alternative; and

(8) A full explanation of why the applicant believes that having the waiver granted will meet the criteria in Env-Wq 1509.04.

(b) The property owner(s) and the person(s) requesting the waiver, if other than the property owner(s), shall sign the request.

(c) The signature(s) shall constitute certification that:

(1) The information provided is true, complete, and not misleading to the knowledge and belief of the signer; and

(2) The signer understands that any waiver granted based on false, incomplete, or misleading information shall be subject to revocation.

Env-Wq 1509.04 Waiver Criteria.

(a) Subject to (b), below, the department shall grant a waiver if:

(1) Granting the request will not result in an adverse impact on the environment, public health, public safety, or abutting properties that is more significant than that which would result from complying with the rule; and

(2) One or more of the following conditions is satisfied:

a. Granting the request is consistent with the intent and purpose of the rule being waived; or

b. Strict compliance with the rule will provide no benefit to the public or the environment.

(b) No waiver shall be granted:

(1) If the effect of the waiver would be to waive or modify a statutory requirement; or

(2) To any of the criteria for obtaining a permit specified in Env-Wq 1503.19.

Env-Wq 1509.05 Decision on Waiver Requests; Conditions.

(a) The department shall notify the person requesting the waiver of the decision in writing.

(b) If the request is denied, the department shall identify the specific reason(s) for the denial.

(c) The department shall include such conditions in a waiver as are necessary to ensure that the criteria of Env-Wq 1509.04 will be met.

(d) If the need for a waiver is temporary, the waiver shall specify the date on which it will expire.

Env-Wq 1509.06 Requests to Extend Deadlines.

(a) An applicant for a permit who has received a notice of incompleteness pursuant to Env-Wq 1503.13(c) who is unable to provide the missing application component(s) by the specified deadline may request an extension of the deadline.

(b) An applicant for a permit who has received a request for additional information pursuant to Env-Wq 1503.14 who is unable to provide the additional information requested by the specified deadline may request an extension of the deadline.

(c) Each request for a deadline extension shall be filed in writing and contain the information specified in Env-Wq 1509.07.

(d) Any request for a deadline extension shall be filed as soon as the applicant realizes the need for an extension.

Env-Wq 1509.07 Content and Format of Deadline Extension Requests.

(a) The person requesting the deadline extension shall provide the following information to the department:

(1) The name, mailing address, and daytime telephone number of the requestor and, if available, a fax number and e-mail address of the requestor;

(2) A brief description of the application to which the request relates, such as project name and town;

(3) The date of the notice of incompleteness or request for additional information in which the deadline for which an extension is being sought was established;

(4) The deadline that was established;

(5) A full explanation of why an extension is needed;

(6) If the extension is not needed for all of the missing components or additional information, which item(s) the request applies to; and

(7) The alternative deadline proposed by the requestor.

(b) If the deadline extension does not apply to all of the missing components or additional information, the applicant shall submit the item(s) to which the request does not apply by the deadline originally established.

(c) The person(s) requesting the deadline extension shall sign the request.

(d) The signature(s) shall constitute certification that the information provided is true, complete, and not misleading to the knowledge and belief of the signer.

Env-Wq 1509.08 Criteria for Deadline Extensions.

(a) Subject to (d), below, the department shall extend a deadline for completing an application or submitting additional information if:

(1) The applicant demonstrates that good cause to extend the deadline exists; and

(2) A complete request for deadline extension was submitted prior to the established deadline.

(b) Good cause to extend a deadline shall be deemed to exist if:

(1) In order to submit the missing component(s) or additional information, the applicant requires information from a third party not under the applicant's control, and the applicant has not received the information despite making diligent efforts to obtain it; or

(2) The applicant has otherwise been prevented by circumstances beyond the applicant's control from obtaining or preparing the missing component(s) or additional information.

(c) The inability to obtain requisite information from a third party based on the applicant's failure to pay the third party for services rendered shall not constitute good cause to extend a deadline.

(d) A deadline shall not be extended for more than one year past the original date established in the notice of incompleteness or request for additional information.

Env-Wq 1509.09 Decision on Deadline Extension Requests.

(a) The department shall notify the person requesting the deadline extension of its decision in writing.

(b) If the request is denied, the department shall identify the specific reason(s) for the denial in the notice sent pursuant to (a), above.

(c) If the request is granted, the department shall establish the new deadline in the notice sent pursuant to (a), above.

APPENDIX

Rule Section(s)	State Statute(s) Implemented
Env-Wq 1501	RSA 485-A:1; RSA 485-A:17
Env-Wq 1502	RSA 485-A:1; RSA 485-A:17
Env-Wq 1503	RSA 485-A:1; RSA 485-A:17
Env-Wq 1504	RSA 485-A:1; RSA 485-A:17
Env-Wq 1505	RSA 485-A:1; RSA 485-A:17
Env-Wq 1506	RSA 485-A:1; RSA 485-A:17
Env-Wq 1507	RSA 485-A:1; RSA 485-A:17
Env-Wq 1508	RSA 485-A:1; RSA 485-A:17
Env-Wq 1509	RSA 485-A:1; RSA 485-A:17; RSA 541-A:16, I(b); RSA 541-A:22, IV